Secretary of Defense

Elliot L. Richardson's

ANNUAL DEFENSE DEPARTMENT REPORT

FY 1974

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The House Armed Services Committee

STATEMENT OF SECRETARY OF DEFENSE

ELLIOT L. RICHARDSON

BEFORE THE HOUSE ARMED SERVICES COMMITTEE

ON THE

FY 1974 DEFENSE BUDGET AND FY 1974-1978 PROGRAM

TUESDAY, APRIL 10, 1973

PREPARED: 3/29/73

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402
Price: $2.10 domestic postpaid; $1.75 GPO Bookstore Stock Number 0800-00181

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THE SECRETARY'S SUMMARY

As Secretary Laird noted in his final report to the Congress, the first four years of the Nixon Administration marked a period of transition:

-- From war toward peace.

-- From a wartime economy to a peacetime economy.

-- From an era of confrontation to an era of negotiation.

-- From arms competition toward arms limitation.

-- From a federal budget dominated by defense expenditures to one dominated by human resource expenditures.

-- From a draft-dominated force to an all-volunteer force.

That transition period is essentially completed.

Now, for the first time in nearly a decade, there is a realistic prospect that the United States may be freed from the travail of direct military engagement in Southeast Asia. Now we are on the threshold of a new era -- an era, as the President has said, of peace through strength, partnership and negotiation. Now we approach the opportunity to dedicate our undiluted efforts to the creation of an international structure which could ensure a "generation of peace." And now we must marshal and make the best use of our resources -- intellectual and creative resources, financial resources, human resources, and managerial resources -- to build, to reinforce, to strengthen, and to stabilize that structure of peace, the foundations for which were so firmly laid during the period of transition.

Advancing the Prospects for a Durable Peace

President Nixon, as events have shown, understands clearly the fundamental shift that is taking place in world affairs and the changing role of the United States in the new era. Because he sensed correctly that the time was ripe for a new approach to our adversaries, and had the courage to act upon his convictions, significant agreements have been reached with the Soviet Union, and the nearly quarter-century of mutual isolation between the United States and the People's Republic of China has been ended. Because he persevered in his search

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for a just and honorable peace in Vietnam, that long and costly war is being brought to a close on terms which recognize the legitimate interest of all of the parties. Because he has consistently demonstrated our desire to replace the tensions of the cold war with constructive and mutually beneficial interactions, the way has been opened to more normal relations with the communist states.

We should have no illusions, however, that the generation of peace is already upon us and that we can now "beat our swords into plowshares." The new peace agreements in Vietnam and Laos are still very fragile, and the armed conflict in Cambodia has yet to be ended. The new approach to the People's Republic of China is still in its early phase, and full diplomatic relations have yet to be established. The current Strategic Arms Limitation agreements with the Soviet Union constitute a major breakthrough, but not the culmination of our efforts to halt, and then reverse, the build-up of competitive strategic power.

It is true that the monolithic structure of the communist world has long since been fractured, and that the Soviet Union and China are now pursuing independent and often mutually antagonistic policies. For our part, we seek to develop positive relations with both governments. But it is clear that we will continue to have fundamental differences with both of these nations, and these differences cannot be ignored. Clearly, a long and extremely difficult period of negotiations lies before us in building the structure for a generation of peace.

Meanwhile, as discussed in detail later in this Report and in the Military Posture Statement of the Chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer, the military power of the Soviet Union and China continues to grow. Not only has the Soviet Union achieved approximate parity with us in the field of nuclear intercontinental arms, but it is also introducing into its sea-based forces a new SLBM (the SS-NX-8) and is developing and testing three new ICBMs -- the SS-X-16, which is a follow-on to the SS-13; the SS-X-17, which is a follow-on to the SS-11; and the SS-X-18, the follow-on to the large SS-9.

China meanwhile is strengthening its conventional forces -- land, sea and air -- and emerging as a major nuclear power in its region. China's nuclear reach will soon extend to all of the Soviet Union, and by the end of this decade it may well extend to the Continental United States as well.

Regardless of what we hope the ultimate intentions of the Soviet Union and the People's Republic of China may be, we must keep before us a clear-eyed calculation of their present and future military capabilities. The military balance, at this crucial juncture in world affairs, is very delicately poised. We have a great stake in maintaining that balance while we continue to pursue ways to give it greater stability. The President's realistic approach to peace and to mutual arms limitation from a position of strength has proven eminently successful during the last four years, and I sincerely hope that we will have the necessary support of the Congress in pursuing it further during the next four years.

The role of the Defense Department and our military forces in bringing this present era of negotiation to fruition in a stable peace is crucial. Without a firm belief in the steadfastness of U.S. commitments and in the continuing capabilities of U.S. forces to support our interests around the globe, we and our allies cannot ensure our security nor continue negotiations with the basic confidence needed to develop new relationships. Thus, our defense programs and force deployments are an essential concomitant to our quest for world peace:

-- We must have a sufficient nuclear deterrent.

-- We must have balanced, ready, well-equipped and trained general purpose forces, both active and reserve, properly deployed, to help deter conventional wars and to maintain the capability to defend our interests should deterrence fail.

-- We must conduct a vigorous research and development program to maintain force effectiveness and to retain a necessary margin of technological superiority.

We intend to pursue this quest for peace in company with our allies, with whom we so strongly share common conceptions and purposes. Maintaining our commitments to our allies, as I said during my confirmation hearings, does not require the United States to play the role of world policeman, but instead requires that we contribute to, and have the capacity to help sustain, a stable international structure. It is by working in tandem that we and our allies can best achieve this objective, and I look forward to consultation and dialogue with our allies, and to working with them to implement the total force concept in a fashion which encourages the strongest possible defense

contribution from each member of the Free World alliance. To this end, I plan to visit both Europe and Asia in the next few months to meet with Allied Defense Ministers.

It is important to note here that our allies -- contrary to the belief of many -- have made appreciable increases in their own defense efforts. Our NATO allies, for example, have made a special effort to maintain and improve their own forces, increasing their defense expenditures by 30 percent in the period 1970-1973. Great Britain, in the Defense "White Paper" presented to Parliament last month, announced an increase in defense spending of more than 5.5 percent in real terms this coming year. Germany also expects to increase its defense expenditures in real terms this year. These are significant additions to the allied defense effort. The extensive equipment improvement programs of our allies continue on schedule. The Euro-Group of ten NATO nations continues to improve cooperation among its members. There is no doubt in my mind that, while much remains to be done, almost all of the allies are taking their defense responsibilities very seriously indeed.

We, too, must continue to take our NATO commitment very seriously -- a commitment consistently supported for more than two decades by each President and every Congress; and, I believe it is fair to say, by most Americans. Yet, there are some knowledgeable people who now advocate substantial unilateral reductions in U.S. forces deployed in Europe. They argue that such reductions could be made without prejudice to our NATO commitment or the principle of common defense. With all due respect, I believe that they are mistaken. Unilateral reductions at this time could not only destroy the current tenuous military balance in Europe, but also destroy the prospect for orderly, balanced, mutual force reductions.

It is argued that by returning our forces to the United States, we will save money. We will not -- unless we reduce our ability to meet our commitments or disband our forces. I do not believe that is what the American people want.

It is argued that war is increasingly remote, and that it is anachronistic to deploy forces overseas. I certainly hope and believe that war is now less likely than before. The President has taken long strides toward that end. But the areas of agreement between us and the Soviet Union are still quite narrow, and the differences that separate us remain great. It has been the constancy of our purpose and the certainty of our strength that has helped to bring this increasingly stable

international situation about. It would be a tragic reversal of long-standing and successful American policy to abandon our positions and our strength before our ultimate goal is achieved.

It is argued that conventional forces are only a symbol of the U.S. commitment, that their numbers are not relevant, and therefore sizeable reductions can safely be made. It <u>is</u> true that U.S. forces are symbolically important, and that they are regarded as a proof of American political interest and commitment. Substantial and precipitous reductions in those forces would, indeed, be seen by our allies and our potential adversaries as a lessening of our interest and commitment. Were we to be imprudent enough to make such reductions, we should not be surprised if the political results were to our profound disadvantage.

But it is <u>not</u> true that the size of our conventional forces in Europe is irrelevant, that their numbers do not matter. We are now unmistakably in an age of approximate nuclear parity, and this means that strong conventional forces are more important, rather than less important, to the deterrence of war. It is essential that the U.S. and its allies have the option of an initial conventional defense. We should not place ourselves in a position where we are forced immediately and irrevocably to nuclear war in response to aggression against us. Strong conventional forces give us a conventional option, thus adding to the plausibility of our commitment to defend our vital interests, and thereby strengthening the total deterrent.

We and our allies have been vigorously pursuing improvement programs which give our forces a continuing, strong defense capability against the Warsaw Pact. We should not mitigate the beneficial effects of those programs now by precipitous reductions in U.S. forces in Europe -- without compensating reductions in the forces of the Warsaw Pact. Until agreements are reached on Mutual and Balanced Force Reductions, we may be sure that unilateral reductions would undermine deterrence, reduce Warsaw Pact interest in negotiating such reductions, and create a serious crisis of confidence in Europe with respect to the U.S. contribution and commitment to the Alliance. I strongly urge that any proposal for significant unilateral reductions in U.S. forces in Europe at this time be treated with great skepticism and caution.

The Nixon Doctrine and the total force planning concept -- taking full account of the forces of our allies, and of our own Reserve

and National Guard forces -- have enabled us to make sizeable reductions in our active forces, and particularly in our forward deployed forces in Asia. We must keep in mind, however, that these reductions place a much greater premium on the continued U.S. support of the forces of our less prosperous allies. I am well aware of the differing views in the Congress with regard to the Security Assistance Program. Nevertheless, I must in all candor say that a failure to support that program will adversely affect the military balance, particularly in Asia, and thus seriously endanger our efforts to strengthen and nurture the newly emerging structure of world peace. Considering the issues at stake, a failure to support the Security Assistance Program at this time would be a false economy and an undue risk.

Making the Best Use of Financial Resources

Those of us in the Executive and Legislative Branches who are responsibile for ensuring an adequate defense for the nation have an enormously difficult task before us -- the task of maintaining a credible military posture with stringently limited resources. There are serious challenges to our modernizing at the pace that the aging of our present weapon systems call for, while maintaining the present size of our forces and achieving adequate readiness for them. The crunch between resources and requirements is upon us.

In considering the general magnitude of the FY 1974 Defense Budget, three factors must be borne in mind. First, it is no longer meaningful to talk of "reordering priorities" away from defense and into social programs. Many have come to expect financial relief as we emerge from a resources-draining experience in Southeast Asia -- relief as dramatic and visible as the signing of a peace agreement. But the fact is that the increases in purchasing power and manpower added for the war have been largely reabsorbed -- the FY 1974 Budget includes only $2.9 billion for all Southeast Asia-related programs, compared with $26.5 billion of comparable purchasing power in 1968; military and civil service personnel at the end of FY 1974 will number only 3.2 million, compared with 4.8 million in FY 1968. As a result of the policies carried out by the President during the last four years, the relative budgetary emphasis between defense and human resources has been exactly reversed. The reordering of priorities has already occurred.

Second, there has been a dramatic rise in manpower costs in recent years. Despite the substantial reduction of almost

1.6 million military and civil service personnel from FY 1968 to FY 1974 -- reductions made possible, for the most part, by the Nixon Doctrine and the withdrawal of our forces from Southeast Asia -- total manpower costs will be more than $11 billion higher. This is so primarily because the nation has chosen a different and more equitable kind of armed force than it had previously -- an all-volunteer force rather than a draft-based force; and because we have chosen to pay our military and civilian personnel, and particularly those military personnel in the lower pay gardes, a salary comparable to that which they could receive in the private sector of the economy. The financial consequences of these decisions are reflected in the FY 1974 Budget.

Third, the debilitating effects of inflation have taken their toll on the purchasing power of the defense dollar, just as they have on the purchasing power of the individual consumer's dollar. This factor, too, is reflected in the FY 1974 Budget.

Keeping in mind the central point that the Defense Budget is spent for essentially two broad categories of resources -- the direct hire of personnel and the purchase of goods and services from industry -- the salient facts about the FY 1974 Budget request are as follows:

-- Military and civil service manpower totaled about 3.7 million in FY 1964 (prewar), 4.8 million in FY 1968 (war-peak), and will number only 3.2 million in FY 1974 -- the lowest level since FY 1950, before the Korean war.

-- Purchases from industry (in dollars of constant (FY 1974) buying power -- adjusting for general, economy-wide inflation) totaled $40.1 billion in FY 1964, $57.4 billion in FY 1968, and will amount to $35.1 billion in FY 1974 -- the lowest level, in real terms, since FY 1951.

-- Total defense outlays in constant (FY 1974) purchasing power amounted to $87.8 billion in FY 1964, $113.4 billion in FY 1968, and are estimated at $79.0 billion in FY 1974 -- down 30 percent from FY 1968 and 10 percent from FY 1964, and the lowest level since FY 1951.

-- Defense-related employment in industry was 2.3 million in FY 1964, 3.2 million in FY 1968, and is estimated at 1.9 million in FY 1974 -- down 41 percent from FY 1968 and 17 percent from FY 1964.

-- In terms of the gross national product, defense took 8.3 percent in FY 1964, 9.4 percent in FY 1968, and is expected to take only 6.0 percent in FY 1974 -- the lowest level since FY 1950.

-- Defense spending as a percent of total Federal spending was 41.8 percent in FY 1964, 42.5 percent in FY 1968, and would be 28.4 percent in FY 1974 -- the lowest since FY 1950. As a percent of total net Public spending (Federal, State, and Local) defense spending was 28.1 percent in FY 1964, 29.2 percent in FY 1968, and would be 18.0 percent in FY 1974 -- even lower than in FY 1950.

-- While Defense spending in constant (FY 1974) purchasing power goes down by $34 billion from FY 1968 to FY 1974, other Federal spending goes up by $50 billion and State and Local spending goes up by $61 billion during the same period. In current dollars, Defense goes up by $1 billion, but other Federal spending goes up by $94 billion and State and Local spending goes up by $103 billion.

In short, in FY 1974 the Defense share of total Federal spending, total net Public spending, the total labor force, and the gross national product would be the smallest in nearly a quarter of a century.

Nonetheless, the question arises as to whether we ought to cut defense spending even further. As a former Secretary of Health, Education and Welfare, I have a very real sense of the pressure of competing claims for scarce resources. Indeed, in my final report as Secretary of HEW I called attention to the fact that to extend existing HEW-supported services equitably to all those meeting the eligibility standards would require additional expenditures of $250 billion a year. This sum would consume not only the entire Defense Budget, but the entire current Federal Budget as well! The obvious point is that with present technologies and resources we cannot now do all that we would like to do: choice is inescapable.

Significant cuts in the Defense Budget now would seriously weaken the U.S. position in international negotiations -- in which U.S. military capabilities are an important factor. Significant cuts would require major unilateral force reductions, undermining our strength and undercutting our efforts to build a more stable balance of forces at lower long-term cost to both sides. And it is these

efforts which, one way or another, will determine our success in building a lasting structure of peace.

Maintaining the Necessary Deterrent

Sufficient strategic and general purpose forces remain vital, in the literal sense of that word, for the security of the nation. The programs proposed in the FY 1974 Budget are meant to ensure that we have that sufficiency of strength. None of the proposed programs is intended to increase the size of our forces -- indeed, in important respects, our forces, both strategic and general purpose, will be smaller rather than larger by the end of the fiscal year. What is proposed in this budget is the modernization and improvement of those forces.

As I hardly need emphasize, the strategic forces programs proposed in the FY 1974 Budget fully conform to both the letter and the spirit of the SAL agreements. The ABM Treaty and the Interim Agreement on strategic offensive arms, as you know, place limits on the deployment of ICBM and SLBM launchers and ABM defenses, while other categories of strategic forces -- for example, bombers, cruise missiles and air defenses -- are not covered. Also, except for certain types of ABM defense systems and the dimensions of ICBM silos, there are no limitations on qualitative improvement -- that is, modernization -- of the forces. And the Soviet Union, as Chairman Brezhnev forewarned us, is pressing forward with modernization programs in all permitted areas.

1. Strategic Retaliatory Forces

The U.S. strategic retaliatory forces at the end of FY 1974 will include a total of 1,054 ICBM launchers (MINUTEMAN and TITAN), and a total of 656 SLBM launchers (POLARIS and POSEIDON) carried on 41 nuclear-powered submarines -- the numbers permitted the U.S. under the present SAL agreement. In addition, the end FY 1974 forces will include a total of 28 bomber squadrons (24 B-52 and 4 FB-111).

The FY 1974 Budget provides for both the near-term and longer-term modernization of the strategic retaliatory forces. For the near-term we plan to complete the on-going programs for the conversion of 31 POLARIS submarines to POSEIDON, the replacement of 550 earlier MINUTEMAN missiles with the MINUTEMAN III, the upgrading of the MINUTEMAN silos, and the acquisition of the Short-Range Attack Missile (SRAM) to improve the penetration capabilities of the bomber force.

The major longer-term modernization programs are the TRIDENT SLBM system, involving both a new submarine and a new missile, and the B-1 strategic bomber. The TRIDENT program is, of course, the follow-on to the POLARIS/POSEIDON programs. It will ensure that we have a credible, effective sea-based strategic missile force for at least the balance of this century. The new submarine will incorporate the latest submarine survivability features and will have a new, longer range missile, giving it a more flexible range of operations and thus providing a hedge against the possibility of a Soviet breakthrough in ASW technology. The program is phased so as to permit an orderly replacement of the current ballistic missile submarines. The TRIDENT program is admittedly expensive -- in FY 1974 we are asking $1,712 million -- but it is a very important program for the longer-term security of the nation. The sea-based missile force is the most survivable element of our strategic retaliatory capability, and the TRIDENT program provides confidence that it will remain so for the foreseeable future.

The B-1 bomber is the planned replacement for the aging B-52s which have given such long service. While smaller and lighter than the B-52, it would be more survivable and have a better penetration capability than the B-52. The B-1 budget request this year is for $474 million to continue engineering development and to hold open the option for production. The first test flight is scheduled for April, 1974, with a 15-month flight test program to follow. Only after a careful scrutiny of costs and performance will a production decision be made.

2. Strategic Defensive Forces

The Strategic Defensive Forces have been reduced and programs curtailed in response to a close examination of the threat and in accordance with the ABM Treaty. This Treaty limits each party to two ABM sites, one for the defense of its national capital area and one for the defense of an ICBM area. We plan to proceed with the completion of the Safeguard site at Grand Forks for the defense of MINUTEMAN, and $402 million is included in the FY 1974 Budget for this purpose. No funds are requested, however, for the permitted national capital area site, although studies with respect to that site are going forward to preserve our option to defend the National Command Authorities (NCA) in Washington, D.C.

With the future in mind, we are also requesting funds to pursue a number of research and development efforts having

to do with strategic defense, including the Site Defense ABM System, and the Airborne Warning and Control System (AWACS). We also plan to continue with the deployment of the Advanced Airborne Command Post System, to ensure the command and control of our forces by the National Command Authorities under all foreseeable circumstances.

3. General Purpose Forces

The proposed General Purpose Forces programs, like the strategic forces programs, emphasize modernization of the existing forces rather than increases in their size. Let me stress again that these forces have already been reduced in strength, not only below their peak Vietnam war levels, but also below their peacetime, pre-Vietnam war levels.

There will be a total of 16 active Army and Marine divisions at the end of FY 1974 -- 6-1/3 fewer than in 1968 and 3-1/3 fewer than in 1964. We will have a total of 163 active Air Force, Navy and Marine Corps tactical fighter and attack squadrons at the end of FY 1974, compared with 210 squadrons in 1968 and 199 squadrons in 1964. We will have a total of 253 active major combat ships (including attack submarines) at end FY 1974, compared with 434 in 1968 and 407 in 1964. In sum, we will have a substantially smaller active force at the end of FY 1974 than we had before the Vietnam war.

This puts a premium on the modernization of our remaining forces. It also underlines the importance of adequate manning, equipping and training for our Reserve and National Guard Forces, and of total force planning that takes into account the forces and capabilities of our allies.

a. Ground Force Modernization

The President's FY 1974 Budget proposed a number of general purpose forces modernization programs for both the near-term and the longer-term. For the ground forces, the principal near-term programs include continued procurement of M-60 series tanks for the Army and, beginning in FY 1974, for the Marine Corps; continued development and procurement of the TOW and DRAGON anti-tank missiles; acquisition of additional Improved HAWK surface-to-air missiles; modification of the COBRA helicopter to employ the TOW; and acquisition of the LANCE nuclear-armed surface-to-surface missile system. The total amount of funds requested for these programs in FY 1974 is $613 million.

For longer-term modernization of the ground forces, the FY 1974 Budget includes funds for the development of a new Main Battle Tank, a new Mechanized Infantry Combat Vehicle, the continued development of the SAM-D surface-to-air missile system, and the continued development of three new helicopters: the Advanced Attack Helicopter, the Utility Tactical Transport Aircraft System, and the Heavy Lift Helicopter. The total amount of funds requested in FY 1974 for these programs is $474 million.

b. Modernization of Tactical Air Forces

For our tactical air forces we propose a number of modernization programs. There is requested $100 million for the purchase of 24 new F-4E aircraft for the Air Force, and $112 million to purchase additional MAVERICK air-to-ground missiles which will mean a major improvement in the anti-tank capabilities of the Air Force.

For the longer term, the Air Force is developing the F-15 air superiority fighter, and $1,148 million is requested in the FY 1974 Budget for the continued development and procurement of this aircraft. Also under development is an experimental, low-cost, lightweight fighter prototype, for which $48 million is requested in this budget. For the close air support role, the Air Force proposes development and advanced procurement of the A-10 aircraft, and $142 million is included in the FY 1974 Budget for continued development of the A-10 and for advanced procurement of long leadtime items for the first 26 aircraft. The A-10, as you know, has been specially designed to incorporate in a relatively low cost airframe the characteristics that are essential for close air support -- maneuverability, responsiveness, survivability, long loiter time and simplicity.

For the near-term modernization of the Navy attack aircraft inventory, $339 million is included in the FY 1974 Budget for the purchase of additional A-6E and A-7E aircraft. Also requested for the Navy is $300 million for the procurement of EA-6B electronic countermeasures aircraft and the E-2C airborne early warning aircraft. Marine Corps aircraft modernization programs include $131 million for the purchase of the first increment of F-4J aircraft to replace the aging F-4Bs, $69 million for the purchase of the first increment of A-4M aircraft to replace the aging early models of the A-4, and $58 million for the last increment of the three squadron AV-8A HARRIER program.

Included in the FY 1974 Budget is $633 million for the continued development and procurement of the F-14 aircraft,

the Navy's principal fighter modernization program. The contractual difficulties encountered in the F-14 program are widely known. We have recently made arrangements with Grumman to ensure the completion of Lot V aircraft -- those funded in FY 1973 -- at the contract price. We have not yet decided to make purchases of the F-14 beyond Lot V. There can be no question, however, that the extensive testing in the last year has shown the F-14 to be a superb aircraft. It is also clear that the Navy has a real need for a new fighter, particularly for the air defense of the fleet. Accordingly, we would like to retain in the budget the $633 million requested for the F-14 and the $98 million requested for the related PHOENIX missile system, pending our review of possible economies in the F-14 program and our continuing exploration of alternatives. We will report back to the Congress as soon as we complete our reevaluation and before final action on the bill.

c. Fleet Modernization

The FY 1974 Budget also provides for the continued modernization of the Navy's general purpose fleet. By the end of FY 1974 the active fleet will consist of 15 aircraft carriers, a total of 164 cruisers, frigates, destroyers, and destroyer escorts, 62 nuclear and 12 diesel powered attack submarines, and more than 60 amphibious ships of various types.

The 15 active aircraft carriers planned for end FY 1974 will include 10 FORRESTAL-class or larger, three MIDWAY-class, and two older ships. The second nuclear-powered carrier, the NIMITZ, has been launched and is scheduled to be delivered to the fleet in FY 1974, at an estimated cost of $635 million. The third nuclear-powered carrier, the EISENHOWER, is now under construction and about one-quarter complete. Delivery of this ship is scheduled in 1975, and it is now estimated to cost $679 million. Some $299 million was appropriated in FY 1973 for long leadtime components for the fourth nuclear-powered carrier, the CVN-70. Another $657 million is requested in FY 1974 to complete the funding of this ship, bringing its total estimated cost to $956 million.

The FY 1974 Budget also includes $137 million for four new types of ships: a Patrol Frigate, a Sea Control Ship, a Patrol Hydrofoil Missile Ship, and a Surface Effects Ship.

Other on-going major fleet modernization programs include seven more DD-963 class destroyers, for which $591 million

is included for FY 1974; five more SSN-688 class nuclear-powered attack submarines, for which $922 million is requested; and three destroyer conversions for which $187 million is requested.

d. Research and Development

Dr. Foster, the Director of Defense Research and Engineering, will give a full account of Defense R&D programs. At this time I simply wish to reiterate my strong conviction that it is essential for the U.S. to have a technological base which is superior to that of potential adversaries. The Soviet Union is making a determined effort to surpass the U.S. in technological achievement. The Soviets can take obvious advantage of open Western societies, while we can have only incomplete knowledge of their progress. We need an adequate, long-term level of R&D funding if we are to avoid technological surprises and maintain a reasonable margin of technological superiority in key areas important to the overall military balance.

Making the Best Use of Human Resources

Secretary Laird, in his reports to the Congress, put great stress on people. I strongly subscribe to the Department's statement of "Human Goals" -- indeed, I have reissued it, emphasizing the important role women can play in defense -- and it is my intention to pursue those goals vigorously. There is one paragraph in particular that seems to me to state clearly the immediate task before us:

> "The defense of the nation requires a well-trained force, military and civilian, regular and reserve. To provide such a force we must increase the attractiveness of a career in Defense, so that the Service person and civilian employee will feel the highest pride in themselves and their work, in the uniform, and the military profession."

As we move to the All-Volunteer Force, our objectives are:

-- To complete the transition to peacetime personnel levels while maintaining the capability to meet our national security commitments.

-- To balance personnel and other defense costs so as to maximize security within budget limitations.

-- To increase the challenge of military jobs and improve the quality of military life in order to attract and retain the talented, dedicated people needed to man our smaller forces.

There have been predictions that ending the draft would produce an organization of substandard volunteers. Recent experience does not support this claim. The quality objectives for military enlistments are being met as well as, or better than, in earlier periods of high draft calls. The quality objectives are:

-- To enlist and retain men and women whose learning capacities match the requirements of military jobs.

-- To enlist and retain people who display self-discipline and control.

-- To maintain the efficiency and the effectiveness of the Armed Forces.

We do not intend to tamper with these quality standards.

As we implement the All-Volunteer Force, we are pressing on with other urgent and important personnel programs. We are, wherever possible, and as the Congress recommended, transforming military jobs into civilian jobs. The Services have instructions to replace at least 31,000 military positions with civilians by the end of FY 1974, and this is just one step toward finding the best and most efficient mix of military and civilian personnel. We also intend to find ways to use our present civilian personnel more effectively, and to attract new civilian personnel of quality to the service of the Department.

It was the policy of Secretary Laird, and it will be my policy, to be as certain as humanly possible that everyone in the Department, military and civilian, man or woman, regardless of race or origin, has an equal opportunity and is accorded equal treatment. The Defense Department has already made good progress toward that goal, and I intend to carry on this work which is so essential to both justice and discipline, and the total effectiveness of the Department.

An important consideration in implementing the All-Volunteer Force is the role of women. Currently, more than 80 percent of the enlisted job specialties within the Department

are open to women. Some 14,000 women were enlisted in FY 1972, and 21,700 are expected to be enlisted in FY 1973. The Services are now working on plans to double the number of women serving in the Armed Forces by the end of FY 1977.

Too often we think of the Defense Department's human resources in terms of those people serving full time, thus slighting one essential component of our Armed Forces -- the Reserve forces. A well equipped, manned and trained National Guard and Reserve, deployable on short notice, is potentially the most economical part of our Defense establishment. It is also an essential part of the total force concept, and I intend to seek ways to improve and strengthen the quality and readiness of the National Guard and Reserve forces.

It is especially important, if we are to make a success of the All-Volunteer Force, that the essential legislation be enacted by the Congress. I refer specifically to the Uniformed Services Special Pay Act, passed by the House during the last session but not yet acted upon by the 93rd Congress, and to the several pieces of legislation aimed at remedying deficiencies in the benefit structure and the family protection for members of the National Guard and Reserve forces. I would emphasize again the increased importance of high quality Reserve and National Guard forces in this period of significantly smaller active forces. I urge the early consideration and enactment of this much-needed legislation.

Marshaling Managerial Resources

Ther is a compelling need -- and with the end of the Vietnam conflict, a new opportunity -- to concentrate executive energies on the urgent task of improving the planning and implementation of the Defense program. We must provide a defense management which is realistic both in its assessments of threats and in its recognition of resource constraints, and which acts responsibly and efficiently in both the development and the implementation of plans for the use of scarce resources.

It is also imperative that we enhance public confidence in the integrity of the weapons acquisition process. In fairness, one must observe that many of the problems encountered are the product of a unique environment. Defense programs are often of such size and character that the norms of the market place -- which we all understand and which are the standards by which we usually judge defense program performance -- do not fully

apply. New defense programs often push the frontiers of knowledge -- in design and technology, for example -- to the point where judgments can only be tentative and where the uncertainties involved can be very large. Nevertheless:

-- We must reinforce the efforts toward reform already underway.

-- We must improve our planning and review processes.

-- We must more strongly emphasize accurate cost estimating throughout the system.

-- We must scrutinize stated requirements more closely to ensure that scarce resources are allocated optimally in terms of real need.

-- We must apply technology to reduce costs as well as to increase performance.

-- We must recognize the strengths of our competitive system, and take advantage of those strengths as fully as possible.

-- We must work with our allies to avoid wherever practical an unnecessary duplication of effort and expense.

-- We must not tolerate a weapons acquisition process that either encourages or relies upon "bailouts."

In connection with the last point, we intend to follow the course indicated by our recent decisions on the much-discussed contractual problems encountered in the LHA amphibious ship and the F-14 fighter aircraft programs -- a course which must protect the public interest in the timely and efficient procurement of products essential to the national defense, as well as in the sanctity of contracts and the integrity of the procurement system.

As Secretary of Defense I intend to give close attention to all of the ways in which we can improve our weapons acquisition process. Deputy Secretary William P. Clements, Jr. and I, together with the Service Secretaries and the Service Chiefs, are now reviewing concrete measures to improve our planning and procurement processes. For example, as one step in this direction we have extended the planning horizon beyond the current

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5-8 years, in order to assess the longer-term costs of proposed new weapons systems, and their potential impact on the future size of the force structure. By doing so we believe it may be possible to improve the near-term allocation of our R&D and procurement resources. We are extending our efforts to improve our cost-estimating techniques. We are exploring the feasibility of applying the "design to a cost" concept to all major weapon systems. We are examining ways to strengthen profit incentives for the reduction of costs on major contracts. We will expect cooperation from defense industry in finding more efficient ways to carry out necessary defense programs.

It is also my intention, and the intention of all of us in the Department of Defense, to continue to seek economies wherever possible in other areas of our defense effort. It is essential, for example, that we use our human resources as effectively as possible, and that we examine closely our manpower requirements. I expect our managers to give close attention to additional ways in which we can improve our management and reduce our costs without sacrificing our capabilities.

Conclusion

The challenge of providing an adequate defense with limited resources is a challenge to which all of us with leadership and management responsibilities in the Department of Defense cannot fail to respond. The international security environment, and the opportunity before us for a generation of peace, require a strong defense posture. This is why I want to sustain a process in the Department of Defense which, under my leadership and with the full participation of all its members, meets the highest standards of discipline, efficiency, honesty, professionalism and public service, transcending any parochial interests, in dedication to the needs of the nation as a whole. This is what the American people want and expect from the Department. It is what we in the Department want and expect of ourselves. These are the high standards we in the Department of Defense know we must maintain if there is to be a national consensus to support a sufficiently strong national defense.

Because of the need for broad public understanding of the essentiality of the defense contribution, and for deep public confidence in the integrity of the defense establishment, we have an imperative obligation to make clear why the defense

forces which we request are required to protect the national security and to enable the President to negotiate from a position of strength. In this Defense Report, I hope to have contributed to these ends.

Finally, may I say, as I begin my new responsibilities, that I am aware of the impact of the Vietnam war on public opinion and of the changes taking place in American society -- events which have caused some people to deprecate the military establishment and to decry the need for a strong defense. I strongly believe that these people are mistaken.

I know the pressures of social need, and I know the pinch of too few resources and too many problems. But I also know that the success of our undertaking to secure a generation of peace demands that we maintain a clear sufficiency of military strength. I am certain that a strong national defense is essential if the United States is to continue to play a constructive and responsible role in the world.

U.S. NATIONAL SECURITY POLICIES AND OBJECTIVES

The U.S. Defense Program is designed to support and advance the national security policies and objectives of the United States. These policies and objectives are now set forth each year in President Nixon's Foreign Policy Report to the Congress. The first of these Reports was transmitted to the Congress in February 1970. Its central theme, reiterated in subsequent Reports, was the need to shape a new foreign policy to meet the requirements of a new era -- an era of peace built on three basic principles:

-- A partnership with friendly nations in which the obligations, as well as the benefits, of peace are equitably shared.

-- A sufficiency of overall military strength, both U.S. and Allied, in relation to that of others.

-- A willingness, in company with our friends, to negotiate in order to seek solutions to the underlying causes that lead to conflict.

The main elements of this new foreign policy have now been firmly established and major initiatives have been taken -- with considerable success. Significant progress has been made in readjusting the Defense program to meet the demands of the new policy. Now we must complete this readjustment and provide the forces appropriate to the support of the new policy and the emerging structure of world peace.

The three basic principles of the new foreign policy are mutually supporting. A strong U.S. military posture is an essential contribution to the preservation of a viable partnership with friendly nations; and strong alliances of friendly nations, with each carrying its equitable share of the burden of the common defense, are essential if we are to have a sufficiency of military strength. Similarly, a sufficiency of military strength is fundamental to meaningful negotiations and the maintenance of peace. Thus, the three principles of strength, partnership and a willingness to negotiate are inextricably intertwined, and no one of them should be pursued at the expense of the others.

A. THE NEW FOREIGN POLICY IN PRACTICE

The pursuit of expanded negotiations, increased partnership, and a sufficiency of U.S. military strength has met with considerable success in the past few years.

1. Negotiations

— President Nixon, in February 1972, personally opened a dialogue with the leaders of the Peoples' Republic of China. While this dialogue has not been the responsibility of the Department of Defense, the presence of U.S. forces in Asia and our steadfastness in support of our allies helped make realistic discussions possible.

— A series of negotiations and agreements were completed during the year with the Soviet Union. Most notable was the conclusion of the ABM Treaty and Interim Agreement on strategic offensive arms signed by the President in Moscow last May, a major advance toward mutually agreed restraint and arms limitation between the nuclear superpowers.

— Multilateral preparatory talks for a Conference on Security and Cooperation in Europe (CSCE) began last November in Helsinki, involving thirty-four nations including the United States and Canada. Direct consideration of military force reductions is to be reserved to the Mutual and Balanced Force Reduction (MBFR) negotiations. CSCE, however, can deal with areas of cooperation and principles of security in a way that contributes to a relaxation of tensions.

— Preliminary consultations with Warsaw Pact countries on MBFR have started after several years of signaling and hesitation. Both of these conferences -- CSCE and MBFR -- represent a continuation of the Western initiatives in expanding dialogues with the Soviet Union, as exemplified by the President's trip to Moscow in May 1972.

-- An Agreement on Ending the War and Restoring Peace in Vietnam was signed in Paris on January 27, 1973, followed some weeks later by a Ceasefire Agreement between the contending parties in Laos.

Despite these achievements, many problems remain to be solved if the "era of negotiation" is to reach fulfillment:

-- There are many complex questions left to address in SALT II as negotiations continue in Geneva.

-- We must work toward an orderly dialogue within the CSCE framework, one leading to concrete agreements that make possible genuine improvements in the relations between East and West.

-- We must build on the beginning made in the initial MBFR talks in Vienna, looking to full negotiations later this year. Our objective in MBFR is -- and will continue to be -- a more stable military balance at lower levels of forces. Negotiated mutual reductions, East and West, are the only prudent path to this objective.

-- We must continue our dialogues with the USSR and the PRC toward further stabilization of relations.

-- The search for peace in the Middle East must continue.

-- And of course, there will be much work to be done to achieve a lasting peace under the agreements reached in Southeast Asia. What President Nixon seeks in Southeast Asia is not simply an end to U.S. military involvement, but rather the establishment of peace and a redirection of effort toward reconstruction, for the benefit of all the people in the region.

2. Partnership

The role the United States intends to play in deterring conflict and maintaining stability in partnership with our friends and allies is summarized in the Nixon Doctrine:

"First, the United States will keep all of its treaty commitments.

"Second, we shall provide a shield if a nuclear power threatens the freedom of a nation allied with us or of a nation whose survival we consider vital to our security.

"Third, in cases involving other types of aggression we shall furnish military and economic assistance when requested and as appropriate. But we shall look to the nation directly threatened to assume the primary responsibility of providing the manpower for its defense."

The "total force concept", under which U.S. active and reserve forces and those of our friends and allies are treated as a total force for the pursuit of common security interests, is a practical expression of the Nixon Doctrine. These security interests include:

Protection of the United States and its Allies

The United States is linked to the countries of Western Europe through basic historical, political and economic ties. United States interests in Western Europe depend in large measure on the prosperity, stability and attitude of our European allies. We and our NATO allies are confronted with a serious military threat in Europe, a threat that requires a strong Western defense capability in response. Our strategic nuclear shield, forward deployed military forces, and capability to reinforce the theater rapidly remain essential to the maintenance of the military balance which, in turn, supports deterrence and political stability in Europe.

The NATO countries have devised a common strategy which has evolved over the years to meet changing conditions and realities. Current NATO strategy, in an era of relative strategic nuclear parity between the United States and the Soviet Union, calls for a range of capabilities -- strategic nuclear, theater nuclear and conventional -- to pose a credible deterrent to aggression at any level.

In support of NATO strategy, the United States has been providing the greater part of the nuclear forces of the Alliance. NATO's general purpose forces are designed to deter a conventional attack on NATO Europe, and to provide an initial conventional defense should deterrence fail. The NATO nations also maintain a capability to protect the air and sea lanes in order to enable support and reinforcements to reach Europe from the U.S.

NATO planning centers on continuing efforts to implement the recommendations for priority force improvements established during U.S. and allied consultations conducted in 1970 and 1971. Both the U.S. and its NATO allies have repeatedly emphasized the importance of retaining U.S. forces in Europe at their current levels. Until agreement is reached on mutual and balanced force reductions, unilateral reductions could undermine deterrence, reduce Warsaw Pact interest in negotiating MBFR, and create a crisis of confidence in Europe with respect to the U.S. commitment to the Alliance.

Our NATO Allies have made a commendable effort to maintain and improve their forces, following the general guidelines of NATO's AD-70 study. In the period 1970-73, allied defense expenditures increased by 30 percent. Significant improvements to allied forces are also taking place as the equipment programs established by the EuroGroup continue on schedule. The EuroGroup itself represents a significant effort by the European nations to coordinate their defense efforts and achieve efficiencies.

We also share permanent security interests with the other nations of the Western Hemisphere. The United States contribution to mutual defense in the Hemisphere is accomplished primarily through the same forces used to protect our own country.

In Asia, we have been implementing the Nixon Doctrine by calling upon friends and allies to assume the primary burden of deterring sub-theater or localized conflicts. However, Asia has been the arena of three costly wars involving the United States in the past thirty years. In spite of recently improved chances for peace in Southeast Asia, there remain continuing possibilities for instability in the area. The military capabilities of our allies and the threat to their security will, in the near term, require that we maintain some well equipped forces overseas for deterrence, or for an appropriate response if deterrence fails.

Of continuing major importance in the Pacific is our security relationship with Japan. The U.S.-Japan security treaty provides for the defense of Japan within the framework of that mutually beneficial relationship.

In Korea, our assistance and continued military presence have contributed to the creation of an environment in which the Republic of Korea (ROK) has been able to enter negotiations with the North Koreans from a position of confidence and strength. The ROK has assumed greater responsibility for its own defense following the implementation of the jointly formulated Five-Year Modernization Plan. However, the presence of some U.S. forces in the ROK will remain imperative.

In the longer term, effective security in Asia will depend in large measure upon the developing interrelationships among the four major powers whose interests converge in the region -- Japan, China, the Soviet Union and the United States. It is our objective to continue to support and assist our friends and allies in Asia in accordance with the Nixon Doctrine.

Maintenance of Political-Military Stability

In the Middle East, as in other parts of the world where we have no formal treaty commitments, our basic security interests rest in the preservation of regional peace and stability. Consequently, a primary U.S. objective in the Middle East continues to be an end to the potentially explosive Arab-Israeli conflict. Our assistance programs and limited military presence in the region are intended to help produce stability and to encourage a climate in which tensions can be reduced. However, peace and stability will be possible only if all the parties involved develop a mutual interest in accommodation and restraint.

The Persian Gulf area contains approximately one-half of the world's proven oil reserves. Continuing access to these reserves by all consumer nations is a matter of great interest to us. We look primarily to the states in the area to maintain peace and stability, and to this end, we have security assistance programs with selected countries, notably Iran and Saudi Arabia. In addition, the presence of a small U.S. naval force indicates a continuing U.S. interest in the area.

Security of Lines of Communication

The capability to keep open vital maritime and aerial lines of communication is a necessary and continuing derivative of our worldwide interests. Our deterrent posture is based, in part, on our capability to deploy and support our forces abroad rapidly. This, in turn, requires that we and our allies be able to defend the air and sea approaches to various theaters in time of conflict. In addition, access to raw materials and overseas trade and investments are essential to the viability of the U.S. economy and to the continued prosperity and security of our friends and allies. The uninterrupted flow of energy sources, particularly petroleum, is vital in this regard.

Cooperation with Allies in R&D

There is an excessive amount of duplication within the NATO Alliance in research and development of weapons systems. By minimizing such duplication, funds could be devoted to a greater range of practical force improvements and to projects that would contribute directly to the maintenance of the technological leadership of the Western Alliance. We are engaging in consultations and common programs with our allies to eliminate or reduce this R&D duplication. For instance, we are carefully reviewing the development programs of our allies and selecting those that will meet our needs. In return, we are offering our allies a choice of U.S. development programs.

3. U.S. Military Strength

Our nation's security interests and the various threats to those interests and to world peace and stability generally, are the basis upon which U.S. military objectives are determined. From these military objectives we derive, in turn, the forces to be maintained and modernized.

U.S. military objectives may be summarized as follows:

-- Together with our allies, deter warfare at all levels of conflict and maintain the capability to defend our interests should deterrence fail.

-- Assist in building the capabilities of our friends and allies to defend themselves.

-- Maintain the current margin of U.S. technological superiority over the Soviet Union to offset the "information lag" and to provide a hedge against technological surprise.

-- Provide the strength upon which successful negotiations can be pursued.

Deterrence

Strategic Nuclear Forces for Deterrence

U.S. strategic offensive forces have long been designed to carry out retaliatory options appropriate to the nature and level of provocation as well as to maintain an assured destruction capability. Our planning objectives and the sufficiency criteria for deterrence of direct strategic nuclear attack against the United States are under review, following the conclusion of the Strategic Arms Limitation agreements, and the achievement of approximate nuclear parity, as well as President Nixon's request for a more flexible capability in the application of our strategic forces.

We also maintain a strategic surveillance and warning capability for selected areas to enhance the survivability of U.S. strategic forces, to provide adequate warning and attack assessment information to the President, and to help verify compliance with the SAL agreements. Our strategic defensive forces also contribute to deterrence, within the limits permitted by the SAL agreements.

Theater Nuclear Forces for Deterrence

Theater nuclear conflict involves the use of nuclear weapons against or by U.S. or allied forces overseas, but not against the United States itself. Deterrence is enhanced by the maintenance of U.S. nuclear forces in the theater which, in conjunction with those of allies, are capable of realistic and effective employment to deny any major military advantage to an aggressor initiating a nuclear attack in the theater.

Theater nuclear forces help make the overall U.S. nuclear deterrent more realistic by providing an alternative to a strategic nuclear response in the event of a localized theater attack.

To fulfill this role, they must permit flexibility of response, and we must be capable of controlling the application of weapons so as to minimize the risk of escalation and limit collateral damage to nonmilitary targets. Theater nuclear forces also contribute to the deterrence of theater conventional conflict.

Theater Conventional Forces for Deterrence

In his 1972 Foreign Policy Report, President Nixon noted that: "At no other time in the nuclear era has it been so essential to maintain a full range of credible options for defending American interests." These options are required because Soviet achievement of approximate strategic nuclear parity with the United States has increased the dangers which might arise from possible conflicts below the level of general nuclear war. Accordingly, we have placed increased reliance on balanced and complementary conventional forces to deter potential aggressors and to provide the President the full spectrum of response options appropriate to all levels of conflict.

Deterrence at the level of non-nuclear conflict is dependent on perceptions by potential aggressors of the capability of U.S. and allied conventional forces to respond successfully to a wide spectrum of attacks while controlling the level of violence. The deterrence provided by the conventional forces is strengthened by the presence of theater nuclear forces and by the inevitable risk of strategic nuclear warfare. The strength of U.S. conventional forces and the strength of the U.S. commitment to support its allies, are fundamental to the credibility of deterrence. Accordingly, we maintain forward-deployed ground, air and naval forces where our vital interests and the threat demand such deployments. We also maintain active and reserve forces which have the flexibility and readiness to respond effectively to theater conventional situations. Since our allies share the responsibility for theater conventional deterrence, we are engaged in a variety of cooperative security programs to improve the overall capability of U.S. and allied forces.

Deterring Sub-theater/Localized Conflict

Our objective, here, is to assist our friends and allies in developing self-sufficient local capabilities, thus enabling them to assume primary responsibility for deterring sub-theater or localized conflict. We also support deterrence at this level

through our ability to undertake unilateral military actions and to provide backup logistical support and appropriate combat support when our interests or obligations so require. In this sense, U.S. forces serve to discourage intervention by other powers in third-world areas.

Developing the Self-Defense Capability of Allies

We have been seeking to reduce both the cost of an adequate defense posture and the degree of our overseas involvement by promoting improvements in the self-defense capabilities of selected allies. The Security Assistance Program furnishes essential materiel and related training support to help achieve this objective. The form of this assistance is chosen in accordance with local requirements, cost and availability. In providing such assistance to our friends and allies we have sought to discourage wasteful and destructive competition with other advanced nations providing similar assistance to their friends and allies. We have also encouraged regional cooperation among our friends and allies as a concomitant to our security assistance programs. Over the years, these programs have enjoyed considerable success, as witnessed by the significant improvements achieved in the self-defense capabilities of the European allies, Taiwan, Korea and others.

Maintaining U.S. Technological Superiority

Previous Defense Reports have emphasized the importance of technology to our security and the vast efforts being expended by the Soviet Union to reduce our technological lead. Attempts to assess accurately any foreign country's military technology are hindered by the security protection afforded weaponry RDT&E. Despite this limitation, it is possible to arrive at certain tentative conclusions with which most U.S. technical specialists concur:

-- The U.S. probably still enjoys some lead time advantage over the USSR in total technological capabilities of military significance. This position results from the greater total effort applied by the U.S. to science and advanced technology over the past several decades. On the other hand, our advantage may be counterbalanced by the likelihood

that the USSR has more knowledge of our capability than we have of theirs, and thus has a time advantage in developing tactics and technology to counter our capability.

-- The present Soviet rate of development of new military-related science and technology appears greater than that of the U.S. For example, the Soviet Union is now attempting to match our superior capabilities in computer techniques and automated laboratory and industrial technical equipment by assigning more technically trained personnel to solve the problems at hand.

-- The Soviet level of effort on military-related science and technology has continued to increase in recent years, whereas the U.S. effort declined each year from 1966 through 1971.

-- The military technology approaches of the U.S. and the USSR have been different -- the USSR has focused more on continuous evolutionary growth of capability in numerous small steps, whereas the U.S. has been inclined to reach for larger step improvements less frequently. Furthermore, in the majority of cases, the USSR has laid heavy stress upon single-purpose systems and devices designed for ruggedness, reliability, maintainability, and low cost, whereas the U.S. has more often sought very high performance systems and devices with potential multi-purpose uses.

The Department of Defense is also concerned about what we don't know -- about what the Soviets may be doing with new technologies which could have enormous military potential. We do know that there is little or no reason to suppose that major innovations capable of drastically affecting the future military balance will abruptly cease in 1973. Consequently, we must continue to maintain a reasonable margin of technological superiority in areas important to U.S. military strength, both to offset our incomplete knowledge of Soviet technological progress and to provide hedges against unanticipated new threats and failures in any of our major weapon systems.

Technological superiority is required in our research and production base, as well as in selected weapon systems

critical to deterrence of both nuclear and non-nuclear war. The U.S. deterrent posture is supported not only by those major systems already in the inventory or under engineering development, but also by the options for new systems made possible by the breadth and depth of our demonstrated technology base.

Support of Negotiations

Our experience in the SAL negotiations and the record of other negotiations with the USSR since World War II show clearly that the Soviet leaders respect power, and hence will bargain seriously only if confronted by a position of strength. We cannot, therefore, expect to create an environment in which mutually beneficial accommodations can be negotiated unless we and our allies maintain the military capabilities needed to preserve an adequate deterrent posture, support our diplomacy, and encourage the Soviets to engage in meaningful negotiations. Some of these capabilities are subject to limitation by mutual agreement but will be indispensable in the absence of such agreement.

B. THE THREAT

As is customary in the Annual Report of the Defense Department, we present a summary of significant elements and changes in the military threats faced by the U. S. The threat is discussed in greater detail in the statement of the Chairman, Joint Chiefs of Staff, Admiral Thomas H. Moorer.

The Soviet Threat

1. The Soviet Strategic Nuclear Threat

The primary potential threat to the United States remains the Soviet Union's land-based and submarine-based ballistic missiles and long-range bomber aircraft. During the past decade, the Soviets have engaged in a vigorous and costly buildup of their forces for intercontinental attack. They are currently engaged in an extensive development and testing program involving several new, improved, or modified strategic weapons systems.

The number of operational ICBM launchers remains at the same number reported last year -- 1527 -- plus about 100 ICBM

launchers at test and training sites. Deployment programs for those ICBMs deployed since 1964, i.e., the SS-9, SS-11 and SS-13, appear to have been completed, but the construction of 91 new silos continues. The smaller silos (in the S-11 class) are expected to be completed by the middle of this year and the larger silos (in the SS-9 class) sometime later. The major objective of the new silo construction program is probably increased survivability. While it is still too early to know exactly what ICBMs are to be deployed in these silos, we believe that initially an improved version of the SS-11 will be deployed in the new smaller silos, and that the new SS-9 follow-on ICBM will be deployed in the larger silos. In addition to the SS-9 follow-on ICBM, the USSR is also developing and testing a new SS-11 follow-on and a new SS-13 follow-on. These three new ICBMs could probably be deployed in the mid-1970s. Although Soviet ICBMs with multiple reentry (MRV) payloads may now be ready for deployment, we do not expect the Soviets to achieve the more sophisticated MIRV capability before the mid-1970s.

Qualitative upgrading of the Soviet SLBM force appears on the horizon with the testing of a new missile, the SS-N-8, which has more than three times the range and somewhat better accuracy than the present missile -- the SS-N-6 -- carried by the YANKEE-class ballistic missile submarine. The platform for this bigger missile appears to be a 12-tube modification of the YANKEE called the DELTA-class. The first DELTA was launched last year and should soon become operational. Including the 30 SLBMs on the nuclear-powered HOTEL-class submarines, but excluding some 60 SLBMs on diesel-powered submarines (which are not considered "strategic missile forces" in terms of the Interim Agreement) the USSR is expected to have a total of 560 SLBMs by mid-1973.

Although YANKEE deployments in 1972 were about the same as in 1971, there seems little doubt that out-of-area operations by the YANKEE and the DELTA boats will increase in number over the next several years. Since 1971, Y-Class submarines have been deployed in both the Atlantic and the Pacific within strike range of the U.S.

The Soviet intercontinental heavy bomber force remains, as it has for the last few years, at approximately 195 aircraft, including about 50 tankers and several reconnaissance aircraft. Some of these bombers are equipped to carry air-to-surface missiles (ASMs).

The Soviets have continued test flying BACKFIRE, their new supersonic swing-wing bomber, which is probably now in series production. There is still uncertainty about the primary mission of BACKFIRE; the weight of evidence favors the view that it is best suited for peripheral attack but an intercontinental capability still cannot be ruled out. Assignment to operational units could begin late this year or next.

2. Soviet Strategic Defensive Forces

The only deployed ABM system contains some 64 launchers around Moscow at four operational complexes. Continued construction in the vicinity of the Moscow ABM system could be for additional launchers, permitted under the ABM Treaty.

A follow-on, long-range ABM system is believed to be under development. R&D on this system as well as on other new ABM components will almost certainly continue.

The Soviets have made and continue to make a major commitment to the air defense of the Soviet Union. Forces totally committed to this mission included about 3,000 interceptor aircraft and about 10,000 surface-to-air missile (SAM) launchers at the end of 1972. These forces continued to improve slowly and steadily during the past year.

Modern fighters are still being deployed, and older type aircraft are being withdrawn from the inventory. A new high speed Soviet fighter aircraft, FOXBAT, has entered the air defense inventory. This aircraft has a good capability for intercept at high altitudes, but its capabilities at low altitudes are limited. Deployments of the SA-3 and SA-5 SAM systems are continuing at a slow pace.

Soviet anti-submarine warfare (ASW) capabilities presently do not represent a significant threat to the U.S. ballistic missile submarine fleet. However, ASW enjoys high priority in Soviet naval planning, and substantial resources are being devoted to ASW research and development.

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3. Soviet Theater Nuclear Capabilities

At the theater nuclear level, the Soviets have deployed over the years several nuclear delivery systems, the most significant being the medium and intermediate range ballistic missile (MR/IRBM) launchers. Ballistic and cruise missile systems carried by Soviet ships and submarines are also capable of theater delivery, as are the medium bombers of Long Range Aviation and Soviet Naval Aviation. Additionally, many of the light bombers and fighter bombers of Soviet Frontal Aviation also have a nuclear delivery capability. Deployed with the ground forces are unguided rockets (FROG) and short range missiles (SCUD, SHADDOCK and SCALEBOARD).

4. Soviet Theater Conventional Threat

The Warsaw Pact contains a total of about 220 divisions among member nations. Many of these divisions, which have fewer combat personnel than U.S. divisions, are understrength in peacetime. Included in the total are about 160 Soviet divisions, somewhat more than half of which -- after a brief period of mobilization -- could be reasonably committed against NATO. Of these NATO-oriented divisions, some 31 are stationed in Eastern Europe. These forces are maintained at a high degree of combat readiness and are supported by a system of mobilization and reinforcement that allows a rapid buildup of forces from the USSR. Soviet divisional structure emphasizes maximum firepower.

Tactical air armies consisting of fighters, fighter-bombers, light bombers, transport aircraft, helicopters, and reconnaissance aircraft would support ground operations. The medium bombers of Long Range Aviation probably would also provide support.

It is important to note that although the size of the Warsaw Pact ground forces has remained relatively stable over the past decade (except for the buildup on the China border), they have continued to pursue qualitative improvement. For instance, air defense capabilities are improving with the deployment of the SA-6 mobile SAM system. There is tenuous evidence of the introduction of the SA-7 GRAIL, a man-portable SAM, into Soviet units. This system has been deployed in Vietnam.

In addition to their T-62 medium tank currently in production, the Soviets have also begun producing and troop testing a new medium tank, the M-1970. A new light tank is also in production.

At present, Soviet tactical aviation consists of about 4,500 combat aircraft assigned to operational units providing air defense, ground support, and reconnaissance. About one-third of the tactical aviation aircraft are deployed in eastern Europe. We expect the gradual buildup in the quality of Soviet tactical aviation to continue. Several new tactical aircraft have already been developed. During the past two years, the Soviets introduced two new models of the FISHBED, the variable-geometry wing (VGW) FLOGGER and FITTER B.

The Soviets have also taken steps to improve their theater reconnaissance and electronic countermeasures (ECM) capabilities.

Poland, Czechoslovakia, and Bulgaria have tactical air armies, which contribute to Warsaw Pact capabilities. This force of 1,000 aircraft is a mix of the newest and oldest Soviet-type aircraft, but the proportion of newer model FISHBED J and FISHBED H continues to increase. This tactical air capability is complemented by over 1,300 fighter-interceptors in the East European national air defense forces which are a basic ingredient in Warsaw Pact theater air capability.

Soviet planners are faced by significant political and military constraints to the exercise of conventional military force against NATO. First, the threat from the PRC requires the Soviets to deploy a large portion of their forces in the Chinese border areas. While this has not to date reduced the capability of those Soviet military forces opposing NATO, some forces that might otherwise provide reinforcements against NATO in case of a European conflict might be withheld as a result of uncertainties attendant to the Chinese threat.

Second, a considerable number of the divisions in the USSR are maintained at reduced strength and would rely in varying degrees on reservists.

Third, there are uncertainties resulting from the multi-national structure of the Warsaw Pact.

Fourth, the logistics burden of supporting large-scale, sustained offensive warfare would impose constraints on Pact forces in terms of both time and distance.

5. The Soviet Navy

The capabilities of the Soviet Navy have continued to improve with the continued introduction of longer range, missile-equipped surface ships, nuclear-powered submarines, and aircraft. Soviet capabilities are best suited for interdiction of sea lines of communication (SLOCs). The Soviet Navy conducts coordinated exercises at considerable distances from the Soviet Union using naval aircraft, submarines, surface ships, and some strategic bombers of Long Range Aviation. The Soviet Navy is also maintaining a steady presence in the Mediterranean.

The most significant challenge to our sea lines of communications (SLOCs) is the Soviet cruise missile and attack submarine force which currently consists of about 275 units, 75 percent of which are diesel-powered. By the late 70s or early 80s, however, a large percentage of the force will be long-range nuclear powered units capable of sustained operations in all open-ocean areas. Continued improvements in speed, quieting and missile/torpedo armament -- particularly cruise missiles -- will considerably add to the Soviet submarine threat.

Additionally, the Soviet Navy has over 150 large and small cruise missile-armed surface combatants and a large number of ASM equipped medium bombers of Soviet Naval Aviation.

Although the Soviets have made significant improvements in their Navy, there remain some basic deficiencies and constraints in the use of these forces. The Soviets must contend with a paucity of all-weather ports, a lack of air cover when the surface fleet operates far from the Soviet homeland, and insufficient open-ocean replenishment. Consequently, Soviet surface units and some submarines have significantly less combat and sustaining capability when operated far from the Soviet homeland. Further, the surface units are dispersed among four widely separated Soviet fleets.

The Soviets appear to be moving to correct these deficiencies. They are improving the endurance time of some of their ships and their methods of open ocean resupply, and have launched their first aircraft carrier. This ship, displacing about 40,000 tons, is the largest combatant ever built in the Soviet Union. Its relatively short flight deck indicates that it has been designed for the operation of vertical or short take off and landing (V/STOL) aircraft and helicopters.

Threats in Asia

1. PRC Threat

A PRC strategic nuclear threat to the United States currently does not exist, but developments are continuing that could affect the nuclear balance. It now seems possible that a strategic missile with a range in excess of 3000 n.m. may be deployed in limited numbers by 1974. This range is sufficient to cover all of the USSR and part of Alaska. We do not expect a deployed ICBM capable of reaching the remainder of the U.S. to achieve an initial operating capability until 1975 at the earliest and a full operating capability by the end of the decade.

Despite the prospect of continued improvements in system components, accuracy and warheads, the PRC's nuclear forces will remain vastly inferior to those of the U.S. and the USSR during the next ten years. However, the prestige and psychological influence of its nuclear capability could be valuable in providing leverage for China's political goals in the underdeveloped world and with the two superpowers.

The PRC appears to have given a high priority to the creation of a theater nuclear capability. Currently, this capability rests primarily in China's small but growing fleet of TU-16/BADGER medium bombers. These aircraft can operate from numerous airfields in China and can reach targets up to 1650 n.m. away without refueling when carrying a normal payload.

China is now deploying liquid-fueled MRBM/IRBM systems, and solid fueled versions will probably be introduced during this decade. We expect the PRC to deploy some of their strategic ballistic missiles in hardened silos during the next few years.

These regional nuclear forces are capable of attacking some Soviet targets as well as U.S. and allied forces that are based in the wide area from Japan through Korea and Taiwan to the Philippines and Southeast Asia.

The Chinese army of from 2.5 to 3 million men continues to be modernized and upgraded. Additional production of armored vehicles indicates plans to increase the armored force and possibly to mechanize some infantry divisions in the next few years.

While its inventory of some 4,000 home defense and tactical aircraft is the third largest in the world, China's equipment is far below the standards of U.S. and Soviet aircraft.

The PRC lags the Soviets in applied aircraft technology by about 10-15 years. However, a native capability in research and design is being developed. China's ground attack fighter force consists of MIG 15/17 FAGOT/FRESCOs, a growing number of F-9 fighter bombers -- a native designed aircraft somewhat larger than but resembling the MIG-19/FARMER -- and the IL-28/BEAGLE light bomber. A small number of China's jet bombers are the TU-16/BADGER; the remainder are IL-28/BEAGLEs.

Chinese air defense suffers from serious weaknesses due to heavy reliance on outmoded aircraft, a very modest surface-to-air missile force, and limited air surveillance capabilities.

The PRC naval construction program has increased in scope and complexity following the initial setback at the time of the withdrawal of Soviet assistance in 1960. The Chinese continue to base their naval offensive strength on their diesel-powered medium range attack submarines which they are still producing in significant numbers, including a new class of submarines. The first few units of a new class of destroyers armed with surface-to-surface missiles are now operational and several more are under construction. We continue to conclude that the capability of the PRC to project its ground forces to areas outside its land periphery will remain limited in the near term.

2. North Korean Threat

After the Soviet Union and the PRC, North Korea is the most powerful communist nation in Asia. Supplied in large part by the USSR and to a lesser extent by the PRC, it has continually improved its military forces which are maintained at a high state of combat readiness. The Army of about 370,000 men could engage in initial offensive operations without outside aid. The Air Force includes nearly 500 jet fighters -- over half of which are older MIG 15/17 models -- and a significant number of small transport and reconnaissance aircraft. Continued upgrading of the Air Force, possibly with newer aircraft from the USSR and China, can be expected. Naval capabilities remain primarily limited to coastal defense and hit and run attacks.

The ROK armed forces, coupled with UN/US forces, present a significant deterrent to North Korean attack. At this time North Korea does not enjoy overall military superiority and any sustained, large-scale operations against the ROK would require substantial materiel and manpower support from the USSR or the PRC.

3. North Vietnamese Threat

The North Vietnamese threat in Southeast Asia remains formidable. As of early March 1973, there were more than 230,000 North Vietnamese/Viet Cong personnel in the Republic of Vietnam, about 70-90,000 VC/NVA and Khmer Communist in Cambodia, and over 100,000 NVA and Pathet Lao in Laos. These forces are heavily reinforced by both artillery and tanks.

The North Vietnamese Air Force, which began 1972 with more than 240 jet fighters -- about one half of which were MIG-19s or 21s -- has lost approximately 95 aircraft, about 75 of which were shot down. North Vietnamese support aircraft include about 100 transports and helicopters. Expected modernization of the fighter force, construction of airfields, and improvements in their early warning/ground controlled intercept (EW/GCI) network will give the North Vietnamese Air Force some capability to conduct intercept missions.

Other Threats

In the Middle East, the Arab-Israeli dispute continues. The withdrawal of Soviet forces from Egypt reduced the chances of a major power confrontation in the area. Nonetheless, they continue to supply that nation with military equipment. In addition, the Soviets have increased their arms shipments to Syria.

U.S. support to Israel is designed to help ensure that nation's ability to maintain a balance of force in the area sufficient to discourage a resumption of open conflict. At the same time, we have restrained our assistance to avoid raising the level of tension, creating an arms race, and jeopardizing efforts to find a political solution to the Arab-Israeli dispute.

In other areas of the world, both the USSR and the PRC are continuing their efforts to increase their influence at the expense of the West and of each other. In some cases, each of the communist rivals overtly supports established governments through economic and military aid and diplomacy. Soviet support to India, and PRC support to Pakistan are examples.

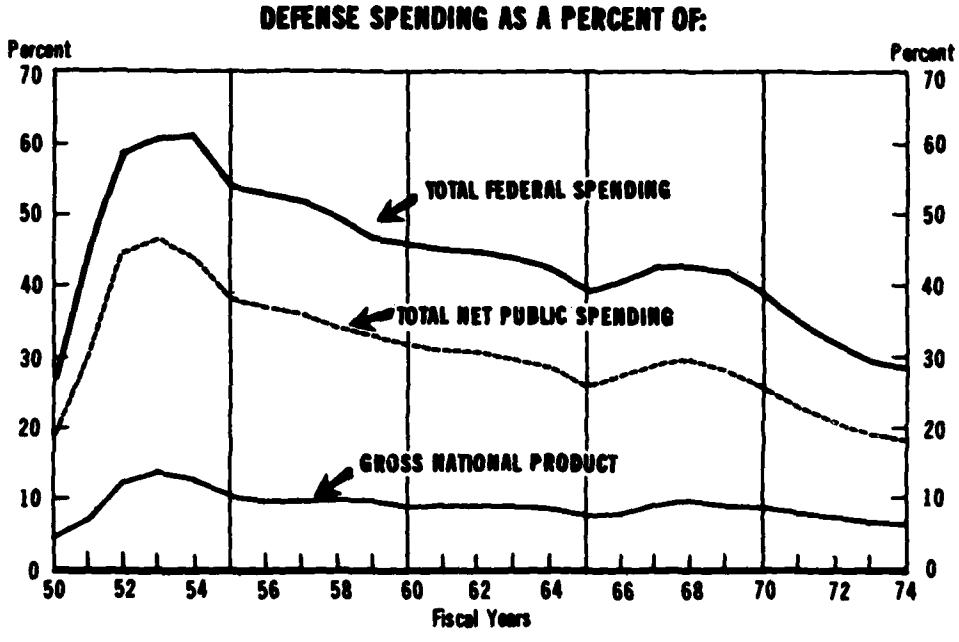
Rivalry between the USSR and the PRC has to some extent limited the influence each has been able to gain from these efforts. Their inability to project military power and the forces of nationalism have also been important constraints. However, we see no evidence of a change in the objectives of communist nations in most developing areas, and the buildup of Soviet naval and air power is impressive in terms of its portent for future attempts to extend influence through military presence as well as political and economic assistance.

THE FY 1974 DEFENSE BUDGET

The FY 1974 Defense budget calls for a total of $85,165 million in Budget Authority (i.e., New Obligational Authority), $5,445 million more than in FY 1973. Of this total, $26,207 million requires authorization for appropriation, including Military Assistance. Defense outlays in FY 1974 are estimated at $79,000 million, $4,200 million more than in FY 1973.

A. THE RELATIVE DEFENSE BURDEN

Despite these increases, the FY 1974 Defense budget would place on our national economy the smallest relative burden in more than two decades. Moreover, Defense spending as a percent of total Federal spending in FY 1974 would be the lowest since FY 1950, before the Korean War; and, as a percent of total net Public spending (i.e., Federal, State and Local), it would be even lower than in FY 1950.



In terms of the GNP, Defense would take 6 percent in FY 1974, compared with 6.2 percent in FY 1973, 9.4 percent in FY 1968 (the peak Vietnam War year), and 8.3 percent in FY 1964 (the pre-Vietnam War year). As a percent of total Federal spending, Defense would

account for 28.4 percent in FY 1974, compared with 29.0 percent in FY 1973, 42.5 percent in FY 1968, and 41.8 percent in FY 1964. And as a percent of total net public spending, Defense would account for 18.0 percent in FY 1974, compared with 18.9 percent in FY 1973, 29.2 percent in FY 1968, and 28.1 percent in FY 1964.

The changing emphasis in public spending is brought out even more clearly in the table below.

Changes in Defense, Other Federal, and State and Local Spending
(In billions of current dollars)

	FY 1964 to FY 1968	FY 1968 to FY 1974	FY 1964 to FY 1974
Defense Spending	$ + 27.2	$ + 1.0	$ + 28.2
Other Federal Spending	+ 34.6	+ 93.5	+ 128.1
State and Local Spending	+ 33.1	+ 103.2	+ 136.3

While Defense spending would rise by $28.2 billion in current dollars from FY 1964 to FY 1974, other Federal spending would rise by $128.1 billion -- more than 4 1/2 times as much -- and state and local spending will rise even more. Netting out grants in aid, the increase in non-Defense public spending during these years -- over $230 billion -- is the equivalent of almost three complete additional Defense budgets.

This shift in public spending is reflected in the changing pattern of public employment, as is depicted in the table below.

Changes in Public Employment (in thousands)

	FY 1964 to FY 1968	FY 1968 to FY 1974	FY 1964 to FY 1974
Defense (includes military)	+ 1,114	- 1,588	- 474
Other Federal	+ 230	- 1	+ 229
State and Local	+ 1,905	+ 2,365	+ 4,270
Total, Public Employment	+ 3,249	+ 776	+ 4,025

In terms of the total labor force, Defense (including Defense-related employment in industry) would account for 870,000 fewer jobs in FY 1974 as compared with FY 1964, leaving the entire growth in the labor force, an estimated 16.5 million, plus the 870,000 released from Defense work, available for civilian pursuits. This increase of 17.4 million is nearly 3 1/2 times the total number of people expected to be employed in Defense work in FY 1974, including Defense-related employment in industry.

In short, the Defense budget proposed for FY 1974 would require a smaller relative share of the nation's economic resources than at any time in the last two decades. And, as President Nixon's FY 1974 Budget Message indicates, this trend is expected to continue in FY 1975. At that time Defense spending will account for the lowest percentage of the total Federal budget since 1940.

B. THE FY 1974 DEFENSE BUDGET IN REAL TERMS

In considering the FY 1974 Budget in real terms, i.e., in terms of its relative buying power, two factors must be borne in mind. First, account must be taken of the overall impact of inflation on the purchasing power of the Defense dollar which, like the dollar in the hands of the individual consumer, has eroded significantly in recent years. Second, account must be taken of the dramatic rise in the cost per man-year. This rise, for the most part, is the result of a national decision:

1. To support a more equitable kind of armed force -- an all-volunteer force rather than a draft-based force; and

2. To pay military and civilian personnel, particularly those military personnel in the lower pay grades, a salary comparable to what they could obtain in the private sector of the economy.

The extent of the pay rate increases, which have occurred since July 1963 and which are scheduled through January 1974, is illustrated on the following page.

Monthly Rates of Pay	Basic Pay: E-1 Recruit less than one year of service 1/	Basic Pay: E-5 (Sergeant) 4-6 years of service	Basic Pay: Colonel or Navy Captain, over 26 yrs svc.	Salary: Civil Servant GS-11 Step 4
July 63 (beginning of FY 64 last prewar year)	$ 78.00	$205.00	$ 985.00	$ 736.66
January 1973	307.20	458.10	2062.50	1282.83
January 1974 (after pay raises assumed in FY 1974 budget)	329.10	490.80	2210.10	1353.42
Percent Pay Increase July 1963 to January 1974.	321.9%	139.4%	124.4%	83.7%

1/ July 1963 rate shown is for a recruit with less than 4 months Service, a pay step that no longer exists. In July 1963, a recruit with over 4 months service received $83.20 per month. Most recruits have less than 4 months service.

On a weighted overall basis -- recognizing that the pay raises became effective at different times in the fiscal year and were not uniform among the various grades -- pay increases from the beginning of FY 1964 through the end of FY 1974 may be summarized as follows:

-- For military personnel, a 135.8 percent increase in basic pay (i.e., excluding allowances).

-- For civilian personnel in the classified service, a 73.5 percent increase in salaries; including wage board personnel (i.e., civilians paid at an hourly rate), the civilian pay increase is nearly 82.5 percent.

In addition, there have been increases in some military allowances and total military retired pay has more than quadrupled -- from $1.2 billion in FY 1964 to $5.3 billion in FY 1974 -- due to increases in both the rate paid and the number of retirees.

These sharp increases in personnel costs are specifically attributable to four major factors:

-- The comparability pay (government with industry) principle, embodied in law in 1967, caused unusually large pay raises during the next several years to achieve a one-time "catch-up."

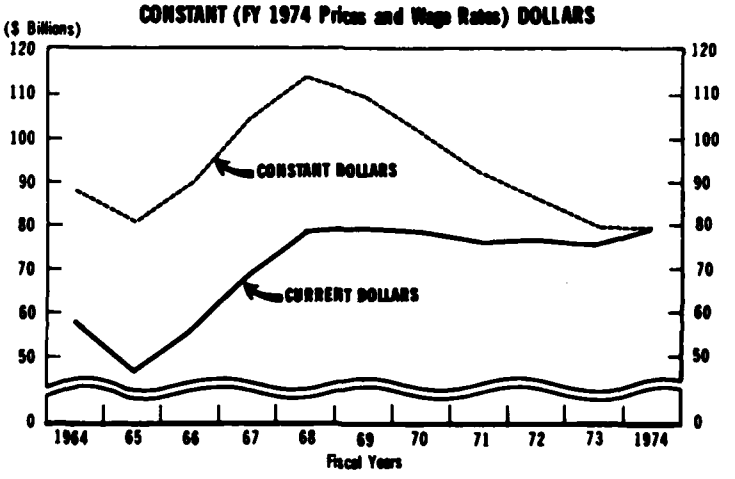
-- Meanwhile, pay raises in industry during this period were themselves very high and government raises, geared to industry, were thus further accelerated.

-- FY 1964 pay rates were disproportionately low for the lower military pay grades, reflecting a policy of compensating in full only the career personnel, and not the draftees and one-termers. It was not only necessary to abandon this policy on the basis of equity, but also to add large additional amounts to move toward a volunteer force.

-- The retired military population is passing through a period of rapid growth, from 411,000 in FY 1964 to an estimated 1,017,000 in FY 1974, as the large number of career personnel who entered the military forces during World War II reach retirement age. Costs are also affected by the much higher pay rates since retired pay is computed as a percentage of the highest pay rates attained on active duty. Moreover, the law requires that retired pay rates be adjusted for increases in the Consumer Price Index (CPI).

The overall impact of these pay increases, and inflation generally, on the Defense budget is depicted in the chart below.

DEFENSE OUTLAYS IN CURRENT AND CONSTANT (FY 1974 Prices and Wage Rates) DOLLARS



The bottom line (current dollars) shows the amounts actually spent or planned to be spent -- without adjustment for pay and price increases. The top line (constant dollars) shows the expenditure trend as it would appear if FY 1974 pay rates and price levels had been in affect throughout the period. For example, the program that cost $50.8 billion in FY 1964 would have cost $87.8 billion at FY 1974 pay and price levels -- an increase of $37.0 billion without adding or promoting a man, and without buying a single additional item. Putting it another way, the $79 billion in Defense outlays planned for FY 1974 is actually $8.8 billion less than the amount expended in FY 1964, and $34.4 billion less than in FY 1968, in terms of real purchasing power.

The impact of these factors has been so massive that all too often the major changes which have been taking place in the Defense program have been obscured. For example:

-- From FY 1964 to FY 1974, payroll and related costs will rise by $21.9 billion -- nearly doubling -- while military and civil service personnel decline by 474,000, or 13 percent.

-- From FY 1968 to FY 1974, payroll and related costs will increase by $11.3 billion or 35 percent, while military and civil service personnel fall by 1,588,000, or 33 percent.

-- Purchase of goods and services from industry, not adjusted for inflation, will drop from $45.4 billion in FY 1968 to $35.1 billion in FY 1974 -- a reduction of 23 percent. Allowing for inflation, the drop is 39 percent from FY 1968 and 13 percent from prewar FY 1964.

-- Defense-related employment in industry will be 1,289,000 (41 percent) below the 1968 level and 396,000 (17 percent) below the prewar 1964 level.

-- The defense budget as a whole, in constant dollar outlays, will be down about 30 percent from the wartime (FY 1968) peak, and about 10 percent below the pre-war (FY 1964) level. Defense personnel (military, civil service, and industry) will be reduced by 36 percent from the FY 1968 level and 14 percent from the FY 1964 level. In fact, Defense personnel will be at lower levels than at any time since before the Korean War.

C. DEFENSE BUDGET TRENDS

As noted earlier, Budget Authority requested for FY 1974 is about $5.4 billion greater than the amount estimated in FY 1973. Total Obligational Authority (TOA) -- that is, the amount available to finance the proposed FY 1974 program -- would be only about $4.1 billion greater than in FY 1973, because the Congress directed that a part of the FY 1973 program be financed from prior year balances in lieu of new budget authority. This kind of adjustment is not projected to recur in the FY 1974 Budget.

In addition to the $4.1 billion increase in TOA, there would be an increase of about $3.3 billion (resulting from a projected reduction in Southeast Asia costs from $6.2 billion provided for FY 1973 to $2.9 billion requested for FY 1974) making a gross gain of $7.4 billion in baseline TOA from FY 1973 to FY 1974. (Southeast Asia costs are discussed in detail later in this section of the Report.) Pay increases (general pay raises in January 1973 and January 1974, wage board increases, military retired pay, and new legislation) would absorb $3.2 billion of that gross gain, and price increases on goods and services purchased from industry (estimated at 3 percent) would absorb another $1.2 billion, leaving a net gain in "baseline" TOA of about $3 billion in real terms. This net gain is distributed as follows:

Baseline TOA: FY 1974 Increase over FY 1973
(In millions of FY 1974 Constant Dollars)

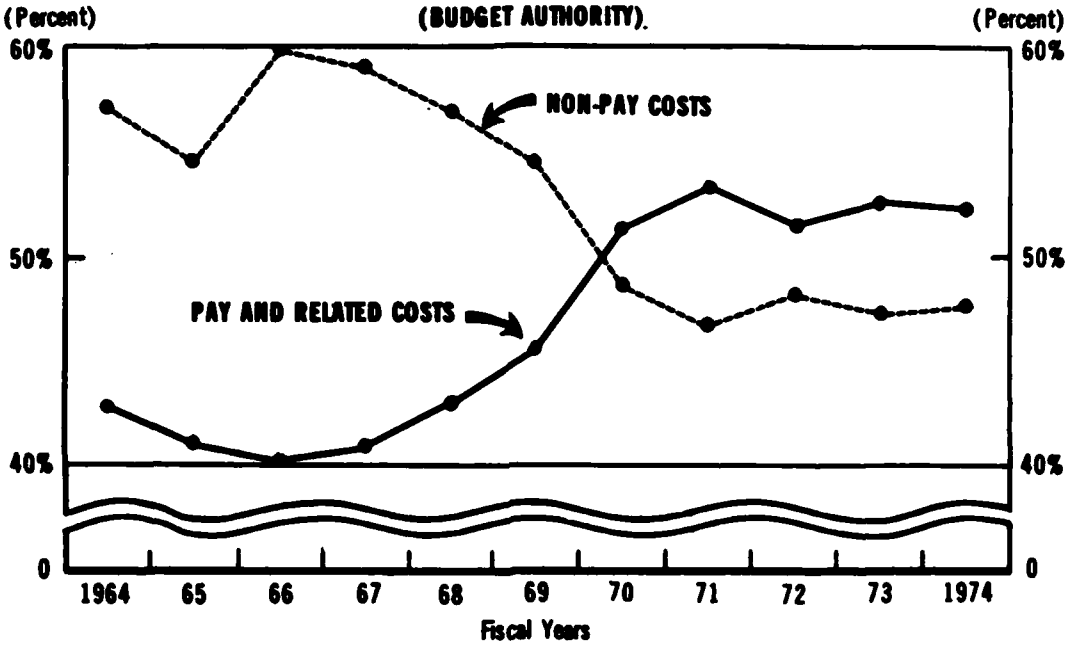
Investment		
Procurement	+ $2,017	
Military Construction	242	
Family Housing Construction	34	
MAP	315	
RDT&E	249	+ $2,857
Operations		+ 144
Total Baseline Force Increase		+ $3,001

The baseline force increase is thus heavily concentrated in the investment area in order to permit overdue modernization programs to go forward. The increase in operations is the net

of an increase for Guard and Reserve forces and decreases for the active forces.

As indicated in the following chart, we now appear to be past the point where pay costs consume an ever growing proportion of the Defense budget, and we are now in a position to direct a greater proportion of Defense resources into the critical investment area.

PAY AND RELATED COSTS AND NON-PAY COSTS AS A PERCENT OF TOTAL DEFENSE BUDGET



Looking ahead, it is reasonable to expect much more moderate rates of growth in personnel costs because:

-- Pay comparability with the private sector has been achieved.

-- The President's economic program should hold future private sector pay increases to much more reasonable levels than those experienced in the recent past.

-- The inequities regarding personnel in the lower military pay grades have been removed.

-- A large part of the cost of moving to a volunteer force has been paid, and the rate of increase in retired pay costs should moderate now that the World War II bulge is mostly behind us.

With regard to Southeast Asia costs, the FY 1973 program, as noted earlier, amounts to $6.2 billion, including $3.4 billion from the basic FY 1973 budget, $2.3 billion in the FY 1973 Budget amendment, and $500 million in operating costs for the second quarter of FY 1973, which has been provided by cutbacks elsewhere. We estimate that through February 1973, about $5.1 billion of this total has been used, leaving $1.1 billion available for the balance of FY 1973. At the present time, we do not have estimates of spending for necessary post cease-fire programs because of the great uncertainties related to mine clearance operations, troop withdrawals (both United States and South Korean), removal of remaining materiel, return of former POWs, search for MIAs and requirements of the South Vietnamese Forces for replacement equipment and consumable supplies.

Keeping in mind the uncertainty associated with FY 1973 Southeast Asia funding, the FY 1974 Budget includes $2.9 billion, as compared with the $6.2 billion provided for FY 1973. Of the $2.9 billion, about $1.9 billion is requested for Military Assistance Service Funded (MASF) activities to provide support of Free World Forces in South Vietnam and, if necessary, in Laos. Approximately half of this amount is for ammunition and equipment procurement, and the remainder is for operations. About $1 billion is requested for the support of U.S. forces in Southeast Asia. Again, it is too early to determine what modifications may be required in this budget request to reflect the evolving situation in Southeast Asia, but as soon as firm estimates are available they will be provided to the appropriate Committees.

One factor which must enter into these considerations is the drawdown in ammunition stocks, worldwide, associated with the increased activity in the closing months of 1972. We are now in the process of assessing these stocks in relation to existing munitions production lines in order to develop the appropriate perspective to make decisions and to recommend to the Congress

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effective programs in this area. Adequate ammunition stocks are, of course, essential to combat readiness.

Fortunately, there was relatively little residual materiel -- less than 40,000 tons -- remaining in Vietnam, which had to be brought back to the U.S. under Operation COUNTDOWN.

The Congress has recently received the GAO report on Vietnamization, and former Secretary of Defense Melvin R. Laird in his final report to the House Armed Services Committee highlighted the highly successful logistics aspects of Vietnamization. This major effort brought us to a peace-time situation with little surplus equipment remaining from the long conflict.

The major forces and acquisition programs to be supported by the FY 1974 Budget are discussed in the next chapter of this Report. The following discussion deals with budget trends in terms of the allocation of TOA to the major program categories.

Strategic Forces program funding in FY 1974 totals about $7.4 billion, approximately the same as in FY 1973 and FY 1972. There are some relatively small reductions in operating forces which are more than offset by increases in personnel costs. The major changes, however, are in the weapon systems acquisition programs. Funding for such on-going programs as POSEIDON, MINUTEMAN III, SRAM and SAFEGUARD declines, but funding for such new programs as TRIDENT, B-1, SCAD, AWACS and Site Defense increases. This major shift in funding from the old to the new programs will continue over the next few years as the on-going programs are completed.

General Purpose Forces programs would receive $26.4 billion in FY 1974, about $.7 billion more than in FY 1973 and $1.2 billion more than in FY 1972. This increase reflects higher pay rates and prices and a major increase in emphasis on modernization of weapons and equipment, offset in part by a reduction in forces and personnel and in the cost for support of U.S. forces in Southeast Asia. Increased funding is provided for a wide variety of ground forces weapons and equipment, the F-15, A-10 and F-4J aircraft, the CVN-70 carrier and the DD 963-class destroyers.

Intelligence and Communications programs would receive about $6 billion in FY 1974, about $300 million more than in FY 1973 and $650 million more than in FY 1972. While this area bears some of the burden of the impact of pay and price increases ($563 million,

FY 1972-74) there is also a real program increase ($87 million, FY 1972-74) which reflects the continuing need to improve the capabilities in these areas. Better intelligence can result in effective planning, and more effective communications improve force command and control, readiness, and operations.

While there are some adjustments within the various programs, Airlift and Sealift activities remain fairly constant at a level of approximately $800 million for FY 1973 and FY 1974. This level, however, is about $300 million less than in FY 1972, reflecting a reduction in Southeast Asia support costs and in C-5A funding, offset in part by an increase in funding for procurement of C-130s.

Programs to modernize Guard and Reserve forces and improve their readiness will be continued in FY 1974 with a further increase of about $400 million over the FY 1973 program level which, in turn, is $700 million above the FY 1972 level. These units are essential to our total force concept which places increased emphasis on the Guard and Reserve forces as the size of our active forces declines.

The Research and Development program would receive about $7.4 billion in FY 1974, approximately $.8 billion more than in FY 1973 and $1.3 billion more than in FY 1972. This increase is almost wholly in engineering development and advanced development programs needed to support weapons system modernization.

Central Supply and Maintenance activities are reduced by approximately $400 million in FY 1974. The adjustments in this support area are generally associated with the lower level of support planned for Southeast Asia.

The Training, Medical and Personnel support program would receive $18.2 billion in FY 1974, about $1.8 billion more than in FY 1973 and $2.8 billion more than in FY 1972. Approximately half of this increase, however, is in the Retired Military Pay Account, all of which is carried in this program. Also, this support program is particularly sensitive to pay raises since it involves large numbers of people. Moreover, it reflects a large part of the costs associated with the continued emphasis on service-attractiveness items directly related to the attainment of an all-volunteer force.

The Administration and Associated Activities support program area has been held at a level of approximately $1.7 billion despite the significant impact of pay and price increases. When measured in terms of constant dollars, this area would in fact be reduced by over $100 million.

The program for Support of Other Nations includes the cost of the Military Assistance Program (MAP), the Military Assistance Service Funded (MASF) program, NATO Infrastructure, support of MAAGs, Missions and International Military Headquarters, and War Reserve Material Support for U.S. Allies. There are a number of adjustments to this program including those related to reduced MASF support. An increase of approximately $400 million in MAP reflects the effect of Congressional action in FY 1973, which limited program execution for both Grant Aid and Foreign Military Credit Sales to the terms of the continuing resolution authority. Our FY 1974 request would restore the overall program to approximately the level included in the President's FY 1973 Budget.

The amounts involved in all of these programs are shown in Table 1 at the end of this Report.

Summary

The FY 1974 Budget reflects the continuing shift in emphasis from combat activities in Southeast Asia to the strengthening of our peacetime baseline forces. Additional manpower reductions are being made as efficiency improves and U.S. forces in Southeast Asia decline further. The growth in manpower costs has been checked, and more resources can now be applied to technology and materiel modernization. Thus, the readiness and capabilities of our smaller force structure will continue to improve.

In short, the FY 1974 Budget represents an effective but austere balance of essential forces, manpower, technology and modernization. And, this balance is provided at a cost that approximates the FY 1973 Budget, except for pay raises and price inflation.

THE FY 1974 PROGRAM AND FORCES

The major forces and weapon system acquisition programs supported by the FY 1974 Defense Budget are discussed in this chapter of the report under two broad headings -- Strategic Forces and General Purpose and Mobility Forces.

A. STRATEGIC FORCES

The SAL Agreements limit the deployment of ICBM and SLBM launchers and ABM defenses, but no limitations are included for strategic bombers, cruise missiles and air defenses. Except for certain new types of ABM defense systems and ICBM silo size restrictions, there are no limitations on qualitative improvements in the forces -- that is on modernization. Indeed, the Agreements anticipate that both parties will continue to modernize their forces. As Admiral Moorer describes in his Posture Statement, the Soviet Union, within the bounds of the Agreements, is doing so in a most impressive manner.

The United States, on its part, is also continuing its modernization efforts in harmony with both the letter and the spirit of the SAL Agreements. The forces and programs proposed for authorization and funding in FY 1974 fall well within the limitations of those Agreements, as shown in the following table.

Operational U.S. Strategic Forces
(end of fiscal year)

	1972	1974	SAL Ceiling 1/
ICBMs	1054	1054	1054
SLBMs	656	656	656
Strategic Bombers	525	498	---
Interceptor Aircraft	619	596	---
SAMs on Site	840	756	---
ABM Defense Areas	---	---	2

1/ Expires in October 1977

The reduction in bombers reflects the phaseout of some of the older model B-52s. The reduction in surface-to-air missiles reflects the phaseout of the BOMARC force.

The only significant force change programmed for FY 1974 is a reduction of two B-52D squadrons. The retaliatory force at the end of FY 1974 will include 1,000 MINUTEMAN missiles, 54 TITAN missiles, 425 B-52 aircraft, 73 FB-111 aircraft and 656 POLARIS and POSEIDON missiles carried on 41 nuclear-powered submarines. The strategic defensive forces at end FY 1974 will include 27 squadrons of interceptor aircraft and 48 Nike Hercules missile batteries.

The Strategic Program proposed for FY 1974 is focused primarily on the modernization of the forces. A summary of the funding proposed for strategic weapon system acquisition programs in FY 1974, compared with FY 1973 and FY 1972, is shown in the table on the following page.

1. Strategic Offensive Forces

The strategic offensive forces program includes both near-term and long-term modernization efforts. Examples of the ongoing, near-term modernization programs are MINUTEMAN III and POSEIDON. The major long-term modernization programs are the TRIDENT submarine and missile and the B-1 strategic bomber.

Sea-Based Strategic Missile Systems

The near-term modernization of the sea-based strategic missile forces is being accomplished through the POSEIDON program. $498 million requested for this program in the FY 1974 Budget udes $237 million for the last five of the 31 submarine conversions planned (including post-delivery and outfitting costs), and about $9 million of advanced procurement funding required for the last submarine tender conversion programmed in FY 1974. This amount will complete funding of the submarine conversion program except for outfitting and post-delivery costs. Another $252 million has been requested for procurement of additional POSEIDON missiles, initial spares and long leadtime items for the final increment of missiles to be procured in FY 1975. Of the 26 submarine conversions funded through FY 1973, 13 have been completed and deployed, 8 are undergoing conversion, 4 have been completed but not yet deployed, and 1 will begin conversion prior to the end of FY 1973. All 31 conversions are expected to be completed by November 1975.

MAJOR STRATEGIC FORCE PROGRAMS

(Dollars in Millions)

	FY 1972 Actual Funding	FY 1973 Planned Funding	FY 1974 Proposed Funding
STRATEGIC OFFENSIVE FORCES			
Conversion of SSBNs to POSEIDON Configuration, Continued Procurement of POSEIDON Missiles and Associated Effort	718	700	498
Development, Procurement and Military Construction Costs of TRIDENT Ballistic Missile Submarine and Missile	105	795	1,712
Development of Strategic Cruise Missile	--	4	15
Continued Procurement of MINUTEMAN III and MINUTEMAN Force Modernization (Inc dev costs)	938	813	777
Development of Advanced Ballistic Reentry Systems and Technology	96	95	95
B-52D Modifications	15	47	63
Development and Continued Procurement of Short Range Attack Missile (SRAM)	245	203	139
Continued Development of Subsonic Cruise Armed Decoy (SCAD)	10	49	72
Continued Development of New Strategic Bomber, B-1	370	445	474
Development and Deployment of Advanced Airborne Command Post (AABNCP)	--	117	83
Development of SANGUINE ELF System	4	9	17
STRATEGIC DEFENSIVE FORCES			
Continued Development and Production of Airborne Warning and Control System (AWACS)	139	194	210

MAJOR STRATEGIC FORCE PROGRAMS (Con't)

(Dollars in Millions)

	FY 1972 Actual Funding	FY 1973 Planned Funding	FY 1974 Proposed Funding
SLBM Phased Array Radar Warning System	--	7	31
Continued Deployment of SAFEGUARD	996	600	402
Development of Site Defense	60	101	170
Identification and Development of Advanced Ballistic Missile Defense Technology	96	93	100
Civil Defense	78	84	89

To provide for the longer term modernization of the sea-based strategic missile forces, the TRIDENT program is being pursued. The TRIDENT program is designed to ensure the maintenance of an effective sea-based strategic missile force in the future, to provide a significant hedge against the possibility of Soviet technological breakthrough, and to establish an orderly replacement program for POLARIS submarines.

The TRIDENT submarine will provide a launch platform incorporating the latest submarine survivability features when it becomes operational in 1978. The TRIDENT I missile, when carrying an average POSEIDON-type payload, will have a range of about 4,000 nautical miles; with a smaller payload, its range could be extended. The effectiveness of the SSBN force can be further improved by the development and deployment of the TRIDENT II missile. A total of $1,712 million has been requested in FY 1974 to complete the program as now planned: $658 million for Research and Development; $872 million for procurement; and $182 million for military construction work on the TRIDENT refit complex and other support facilities. The procurement request includes $587 million for the first TRIDENT submarine. This amount, together with FY 1973 funds of $194 million, will finance its currently estimated total cost of $781 million. The FY 1974 request also includes $281 million of advance procurement funds for additional TRIDENT ships and about $5 million for technical support of missile facilities.

The $15 million requested for the strategic cruise missile is for the conduct of preliminary design studies. The Soviet Union has had an extensive program in this area and has a wide variety of cruise missiles. Cruise missiles are not covered by the Interim Agreement, and the United States should give some attention to this particular area of technology, for both the strategic and the tactical roles.

Intercontinental Ballistic Missile Systems

For the near term modernization of the ICBM forces, $777 million has been included in the FY 1974 Budget for the MINUTEMAN program. About $394 million is needed for procurement of 246 MINUTEMAN III missiles, the final buy to complete the currently planned force objective of 550 missiles. To protect the option to deploy more than 550 MINUTEMAN IIIs, if that should prove necessary in the future, another $23 million has been requested for long leadtime items. About $9 million is included for

MINUTEMAN II improvements. The remaining $351 million is required primarily to continue work on the MINUTEMAN silo upgrading program and the Command Data Buffer System.

The MINUTEMAN force, today, is highly survivable, but provision must be made now to hedge against a major improvement in the capabilities of Soviet forces to attack hard targets. In addition, the targeting flexibility of the force needs to be improved. These objectives are being met by the silo upgrading program and the installation of the Command Data Buffer System. The silo upgrading program is designed to provide improved protection against nuclear blast and radiation effects. The Command Data Buffer System will provide rapid retargeting of MINUTEMAN III from the launch control centers, which will enhance the flexibility of force employment. The silo upgrading program is coordinated with the MINUTEMAN III conversion at one base, and with the installation of a Command Data Buffer System at all MINUTEMAN III bases, so that all three programs can be completed in the most efficient manner.

Another important developmental effort that is continuing for the strategic offensive forces is the Advanced Ballistic Re-entry System (ABRES) program, for which $95 million is requested in the FY 1974 Budget. This program supports investigations of several types of improved re-entry systems.

Strategic Bomber Systems

Funds are provided in the FY 1974 Budget for three important programs needed for the near-term modernization of the bomber forces. The first of these is a new program -- structural modifications to extend the service life of 80 B-52D aircraft. Recent inspections of the B-52D fleet have revealed fatigue-induced structural weaknesses which will require extensive structural modifications if the aircraft are to be kept in operation beyond the mid-1970s. The B-52G and H aircraft are not affected by this problem since they were manufactured under a different process. Without the B-52Ds, the conventional bombing capabilities of the B-52 force can be maintained only at the expense of its strategic role. Modification of 80 B-52Ds is scheduled to start in FY 1973, at a total cost of $197 million. Around $47 million would be made available in FY 1973, $13 million by reprogramming. Another $63 million has been requested in FY 1974 for this program, and most of the remaining funds would be provided in FY 1975.

The second program is the continued acquisition of the Short Range Attack Missile (SRAM), which would be used by strategic bombers to attack terminal defenses as well as primary targets. The missile uses a solid fuel engine to attain supersonic speeds along the selected flight profile, and it can be launched at high or low altitude. Having successfully demonstrated its performance capabilities, SRAM has been in production for over two years. The FY 1974 Budget provides $139 million for procurement of 454 missiles. This number, together with missiles procured previously, will provide a total of 1,500 missiles, which will equip a force of 17 B-52 G/H and 4 FB-111 squadrons. The budget also includes $47 million to modify B-52 aircraft to carry SRAM. All units of B-52 G/H and FB-111 aircraft are now scheduled to be equipped with this new missile by the mid-1970s.

The third near-term modernization program is the Subsonic Cruise Armed Decoy (SCAD), which is designed to aid bombers in countering projected improvements in Soviet area air defenses in the late 1970's. SCAD would simulate the radar characteristics of a B-52, thereby presenting many additional incoming objects that the Soviets must counter with area defenses. These decoys will provide a very efficient way for the bomber force to saturate and confuse air defenses. SCAD is also being designed with an option to incorporate a warhead and the associated improved guidance and provision for increased range. This would be accomplished with minimum modifications by modular changes.

Competitive development of prototype engines for SCAD is now being conducted by two contractors. Extensive flight testing of the developed system will be accomplished before a production decision is made. The SCAD program is proceeding on a fly-before-buy basis, and the first flight tests are now scheduled for FY 1975. The FY 1974 Budget contains $72 million to continue development of this new system.

To provide the option for the longer term modernization of the bomber force, $474 million is included in the FY 1974 Budget to continue engineering development of the B-1 Intercontinental Bomber. Although the B-1 is smaller and lighter than the B-52, it will have greater range, speed, and payload capability than the B-52 on a comparable mission. The B-1 is designed for a high degree of survivability from launch to recovery, and for a quick reaction take-off capability, with rapid acceleration to

escape nuclear attack. It will have a wide range of altitude and airspeed capabilities, from very low altitude subsonic to high altitude supersonic, as well as the avionics needed to penetrate Soviet defenses and accurately deliver weapons on target. Sufficient space and power will be available for growth in ECM and other penetration capabilities if that should be required by a greater defensive threat.

The B-1 engineering development contract with North American Rockwell is a Cost Plus Incentive Fee Contract, with no commitment to produce the aircraft. The B-1 is being developed in such a manner as to minimize concurrency between development and production. After the first flight scheduled in April 1974, there will be a 15-month flight test program involving three flight test aircraft. No production decision on the B-1 will be made until the performance requirements are demonstrated and firm cost data are available.

Strategic Command and Control

The credibility of our strategic deterrent depends in part on the existence of a reliable and survivable command and control system. The most critical need, as has been noted often in the past, has been an airborne command post with larger capacity, increased survivability, and greater endurance. The EC-135 aircraft currently used for this purpose are inadequate because they have no automatic data processing capability, lack proper communications, are not hardened against the full range of nuclear effects, provide insufficient space for staff, and have no further growth capacity. Accordingly, the decision was made a year ago to develop the necessary equipment and procure new aircraft to serve as the Advanced Airborne Command Post (AABNCP).

The proposed new aircraft is a modified Boeing 747 specially equipped to provide a modernized, highly survivable capability for effective command and control of our strategic forces on a continuous basis before, during, and after any nuclear attack on the United States. The program will be conducted in three phases. In the first phase, EC-135 equipments will be transferred to three 747 aircraft to provide an interim National Emergency Airborne Command Post (NEACP) capability. The second phase involves the development of an Advanced Command, Control and Communications package using one test-bed 747 aircraft, and the installation

of this package in three additional 747 aircraft. In the last phase, the three interim NEACP aircraft will be retrofitted with the advanced package, making a total of seven newly equipped 747 AABNCPs.

Funding for two interim NEACP and one test-bed aircraft was approved in FY 1973. The FY 1974 Budget includes $37 million for continued development of the AABNCP system, $32 million to procure the fourth (third interim) aircraft, and $14 million for military construction. Procurement of the last three aircraft is now planned for FY 1976, although procurement of one or more may be proposed in FY 1975, depending upon progress in the development program.

Additional capabilities for survivable communications with submerged submarines, beyond those provided by the current TACAMO communication relay aircraft, may be needed. For this reason $17 million has been requested in the FY 1974 Budget to continue development of the SANGUINE Extremely Low Frequency (ELF) system. The development effort over the next three years is expected to determine whether current estimates of cost and environmental compatibility are valid.

2. Strategic Defensive Forces

Air Defense

Planning of the CONUS air defense system has undergone a number of major changes during the last decade. The current objectives are to provide a defense of the U.S. against a small bomber attack, assuming a relatively short period of strategic warning, and as a minimum a SAM defense of Washington, D. C. Forces which can satisfy these objectives will also be capable of performing peacetime surveillance and identification functions to protect the sovereignty of U.S. air space.

Force readiness has been reduced consistent with this planning assumption on strategic warning. More specifically, the interceptor alert rate has been reduced, five squadrons of BOMARC missiles have been phased out, and all the U.S. Back-Up Interceptor Control (BUIC) Centers, except one, have been placed in semi-active status. This last change permits some savings in operations and maintenance costs while retaining a

command and control capability that can be brought back to full operational status with a relatively short period of strategic warning.

For the long term, a number of research and development efforts are underway which will provide the option to deploy a modernized air defense force in the future. The FY 1974 Budget includes funds for two key systems: the CONUS Over-the-Horizon Backscatter (OTH-B) radar, and the Airborne Warning and Control System (AWACS).

The OTH-B program would provide two fixed base radar systems -- one facing east and one facing west -- for the long range detection of aircraft approaching the North American continent. While current systems can detect aircraft targets out to about 200 n.m. if they are at high altitudes, the OTH-B could provide all-altitude surveillance at a much longer range. The FY 1974 Budget includes $5.5 million to continue the OTH-B development program.

AWACS is designed to detect, identify and track approaching aircraft, and if they are determined to be hostile, to direct our interceptors against them. A small force of AWACS aircraft could replace the bulk of the existing ground-based aircraft warning and control system, which is quite vulnerable to nuclear attack. AWACS is also designed to perform a variety of functions in the tactical air mission, such as surveillance, warning and command and control over the battlefield.

The AWACS consists of an air surveillance radar and the associated data processing and communications equipment, all installed in a modified Boeing 707 aircraft. One of the most important and unique technical features of AWACS will be its capability to detect and track aircraft flying at low altitude, over land as well as water.

The two prototype radars for the AWACS system were flight tested in Boeing 707 aircraft during 1972. Analysis of the test results has been completed, and the radar built by Westinghouse was selected on the basis of superior performance. A system integration demonstration will be conducted to verify that the various components can be successfully integrated into an operationally useful system. Then, the operational capabilities of the complete system, installed in prototype aircraft, will be

demonstrated in as realistic an operational environment as possible. The FY 1974 Budget includes $198 million for continued development and testing of AWACS, plus $12 million for advanced procurement, making a total of $210 million for the AWACS program.

Another element of a modernized air defense force is an Improved Manned Interceptor (IMI) to replace current interceptors. Although no funds are included in the FY 1974 Budget for this purpose, we are continuing to examine the feasibility of adapting an aircraft currently under development to perform this mission. An IMI would have improved performance characteristics, including a "look-down, shoot-down" capability. In addition, the Army's new SAM-D surface-to-air missile system, now under development for theater air defense, could also be used in a modernized air defense force.

Missile Warning and Space Systems

Early warning of an ICBM, SLBM, or Fractional Orbital Bombardment System (FOBS) attack is relayed to the North American Air Defense Command, the National Military Command Center and the Strategic Air Command from a network of radars and satellite-based sensors. For many years the Ballistic Missile Early Warning System (BMEWS) radars, supplemented by the OTH forward scatter radars, were the primary means of obtaining reliable warning of an ICBM attack.

The maturing of satellite-based sensor technology has permitted the successful development and deployment of the early warning satellite system. This system now provides high confidence, virtually immediate warning of a ballistic missile launch from current ballistic missile submarine launch areas, as well as ICBM and FOBS launch areas.

The satellites are deployed in synchronous equatorial orbits. Data obtained by the satellites is transmitted to ground stations, processed, and sent to SAC, NORAD, NMCS and other users. Additional satellites will be launched as required to keep this system fully operational.

To provide further assurance of timely warning of an SLBM launch against the U.S., it is proposed to augment the current system of coastal radars with two new phased array radars constructed from components of a surplus SAFEGUARD Perimeter Acquisition Radar. A total of $31 million is included in the FY 1974 Budget for the acquisition of this system, and a

reprogramming request for $7 million in FY 1973 funds has been submitted separately to the interested Congressional Committees.

Ballistic Missile Defense (BMD)

In accordance with the ABM Treaty, which limits each party to one ABM deployment area for the defense of ICBMs, the SAFEGUARD site at Grand Forks will be completed, but work on the second site at Malmstrom has been terminated. Technical progress on SAFEGUARD over the past year has been excellent, and there are no technical problems affecting the plan to proceed with the Grand Forks deployment. The FY 1974 Budget includes $402 million to continue SAFEGUARD development, test and procurement for the Grand Forks site. This site will enable the U.S. to obtain for the first time operational experience with a deployed BMD system.

The Treaty also permits each party to deploy an ABM defense for its national capital area, i.e., in the case of the U.S., the National Command Authorities (NCA) in Washington, D.C., but no funds have been included in the FY 1974 Budget for such a deployment. We are continuing, however, to conduct the necessary design, systems engineering and program planning studies for possible deployment of such a site. It could utilize either SAFEGUARD components or a modified version of the more advanced SITE DEFENSE system now under development.

The SITE DEFENSE program, for which $170 million is included in the FY 1974 Budget, is oriented toward developing options for a more effective defense of MINUTEMAN, or other point targets, as a hedge against the need for such a defense in the future. This program is still in the early phases of development. The system will consist of a new phased array radar, a commercial data processor and an improved version of the SPRINT missile used in the SAFEGUARD system. The proposed program includes studies to define the modifications which would be needed to adapt SITE DEFENSE for defense of the NCA.

It is also essential that the United States maintain a vigorous technology development program in the ballistic missile defense area, to prevent technological surprise, to determine the technical feasibility of new BMD concepts, and to assist in the design and evaluation of our strategic ballistic missile systems. Some $100 million is included in the FY 1974 Budget for this Army exploratory and advanced development program.

Civil Defense

The civil defense program has been reorganized under the new Defense Civil Preparedness Agency which was created in 1972. One new aspect of the civil defense effort is the increased emphasis on total disaster preparedness. All parts of the civil preparedness program are being adapted to emphasize dual-use plans, procedures and preparedness for improved crisis management in both peacetime and attack emergencies, in accordance with Presidential direction.

In March 1972, the Office of Emergency Preparedness, which is responsible for administration of the Disaster Relief Act of 1970, requested DOD to provide advice and guidance to local governments on organization and preparedness to meet the effects of natural disasters. The Department is working toward this as well as the statutory civil defense objectives with a new On-Site Assistance Program. The approach being taken in this program is to have teams of Federal-State personnel make on-site surveys of local civil preparedness situations. The teams analyze local capabilities and needs and develop action plans to meet those needs. Concrete and immediate assistance is provided and plans are developed for long-term readiness assistance which take maximum advantage of Federal, State and local resources. Also stressed is the training of local civil preparedness coordinators to improve their crisis management capabilities.

In FY 1974 the Department will also develop a program to provide guidance to State and local governments in preparing plans for contingency evacuation or dispersal in case of natural disaster emergencies as well as enemy attack. This guidance will stress the utilization of local resources -- public and private -- to effect orderly evacuation.

Tests of a prototype, low-frequency radio warning system in the mid-Atlantic states will be undertaken in the latter half of FY 1973. Pending completion and analysis of these tests, no funds have been requested for additional facilities.

The FY 1974 Budget includes $89 million for the civil defense effort. Over forty percent of this total is for direct financial assistance (matching funds) for State and local civil defense activities.

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B. GENERAL PURPOSE AND MOBILITY FORCES

General purpose ground, naval, and tactical air forces, together with mobility forces, are an integral part of the overall U.S. deterrent posture. These forces, both active and reserve, constitute the primary means for dealing with armed conflicts below the level of strategic nuclear war. Because they are designed in large part to supplement and complement the forces of our friends and allies abroad, they must be capable of rapid worldwide deployment to meet a wide range of military contingencies.

The general purpose forces programmed for end FY 1974 reflect the impact of the Nixon Doctrine as well as the winding down of combat operations in Southeast Asia. As shown in the table below, the forces at end FY 1974 will fall not only well below their peak-Vietnam war levels, but also distinctly below their pre-Vietnam war levels.

Active Forces (end Fiscal Year)

	1964	1968	1974
Ground Divisions	19 1/3	22 1/3	16
Tactical Fighter/Attack Squadrons	199	210	163
Major Combat Ships (Including Attack Submarines)	407	434	253
Airlift Squadrons	67	63	34

In view of these reductions in the active forces, the National Guard and Reserve forces now play a greater role than before the Vietnam War in fulfilling total U.S. force requirements. They are now the initial and primary sources for augmentation of the active forces in any emergency requiring rapid and substantial increases in the general purpose forces. In fact, some National Guard and Reserve units are now performing missions previously assigned to the active forces, principally in air defense and airlift. FY 1974 will see the continuance of the newly intensified efforts to ensure that the Guard and Reserve forces are adequately manned, trained and equipped to fulfill their significantly enlarged mission.

As in the case of the Strategic Forces program, the emphasis in the General Purpose Forces and Mobility Forces programs is on modernization. The funds requested for the more important weapon system acquisition programs proposed for FY 1974, and the funds provided for FY 1972 and 1973, are shown on the table beginning on the following page. These acquisition programs and the forces they are intended to modernize are discussed in the balance of this chapter.

1. Ground Combat Forces and Modernization

The peacetime active, or "baseline", ground forces currently deemed necessary to support our national security objectives, taking into account the capabilities of our allies, are 13 active Army divisions and 3 active Marine divisions. Countering a major conflict, such as in the NATO area, would require heavy reliance on the Reserve Component force of nine more divisions (8 Army, 1 Marine Corps) to reinforce the active forces.

The more important programs proposed for funding in FY 1974 to modernize these forces are discussed below.

M60 Series Tanks

Approximately $188 million is included in the FY 1974 budget for the near term modernization of the Army and Marine Corps tank forces. Of this amount, about $135 million is required for the acquisition of 360 M60A1 tanks for the Army, $39 million for the procurement of 120 M60A1 tanks for the Marine Corps, and $14 million for product improvements of existing M60A1 Army tanks. The proposed procurement of M60A1 tanks for the Marine Corps in FY 1974 is the first increment of a four-year modernization program designed to replace the older M48 and M103 series tanks presently in the Marine Corps inventory. The M60A1 offers significant improvements in firepower, mobility and survivability over these older tanks. The previous plan was to procure the new Army XM803 tank as a replacement for the outmoded models, but cancellation of that program has eliminated this course of action.

The $14 million for product improvements is another increment of an ongoing Army program to update its existing inventory of M60A1 tanks.

Selected General Purpose and Mobility Forces Modernization and Improvement Programs

	(Dollars in Millions) FY 1972 Actual Funding	FY 1973 Planned Funding	FY 1974 Proposed Funding
Ground Combat Forces			
Continued Modification and Procurement of M60 Series Tanks (Including Marine Corps)	82	179	188
Development of New Main Battle Tank	38	20	52
Development of Mechanized Infantry Combat Vehicle (MICV)	2	8	10
Development and Continued Procurement of TOW and DRAGON Anti-Tank Missiles	84	105	137
Acquisition of LANCE Missile System	113	104	85
Acquisition of Improved HAWK Surface-to-Air Missile Systems (including Marine Corps)	95	143	139
Continued Development of SAM-D Surface-to-Air Missile System	116	171	194
Procurement of TOW-COBRA Modification	--	--	64
Development of Advanced Attack Helicopter	2	20	49
Continued Development of Utility Tactical Transport Aircraft System (UTTAS)	24	50	109
Continued Development of Heavy Lift Helicopter (HLH)	30	38	60
Tactical Air Forces			
Procurement of F-4E Aircraft	131	170	100
Acquisition of MAVERICK Air-to-Ground Missile	92	79	112

	(Dollars in Millions) FY 1972 Actual Funding	FY 1973 Planned Funding	FY 1974 Proposed Funding
Continued Development/Procurement of F-15 Air Superiority Fighter	420	908	1,148
Development and Advanced Procurement of A-10 Close Air Support Aircraft	47	48	142
Development of Lightweight Fighter Prototype (Including Engine)	9	46	48
Procurement of Improved F-4J Aircraft	--	--	131
Procurement of AV-8A HARRIER Aircraft	121	131	58
Procurement of A-4M Aircraft	2	2	69
Acquisition of A-6E Attack Aircraft	105	168	149
Acquisition of A-7E Attack Aircraft	89	181	190
Acquisition of EA-6B Aircraft	218	164	135
Acquisition of E-2C Fleet Early Warning Aircraft	306	185	165
Continued Development and Procurement of F-14 Multi-Mission Fighter	929	733	633
Acquisition of PHOENIX Missiles	106	96	98
Naval Forces			
Procurement of CVN-70 Aircraft Carrier	--	299	657
Procurement of DD-963 Destroyers	603	249	591
Conversion of DLG/DLGN Frigates	128	101	187
Acquisition of Active Standard and HARPOON Anti-Ship Missiles	55	85	98

	(Dollars in Millions) FY 1972 Actual Funding	FY 1973 Planned Funding	FY 1974 Proposed Funding
Acquisition of CONDOR Anti-Ship Missile	21	21	31
Continued Development of AEGIS Ship Air Defense System	100	79	43
Acquisition of Patrol Frigate	12	204	7
Design and Advanced Procurement of Sea Control Ship	5	13	29
Development and Advanced Procurement of Patrol Hydrofoil Missile Ship	8	30	28
Development and Test of Surface Effects Ship	24	32	73
Procurement of SSN-688 Class Nuclear Attack Submarines	905	1,047	922
Continued Development and Procurement of MK-48 Torpedo	181	184	191
Development of Encapsulated HARPOON	4	12	12
Development and Procurement of S-3A Carrier-Based ASW Aircraft	578	619	546
Continued Procurement of the P-3C Land-Based ASW Aircraft	270	132	156
Undersea Surveillance Systems	139	129	125
Mobility Forces			
C-5A R&D & Prior Year Unfunded Deficiencies	322	108	43
Procurement of C-130 Aircraft	40	93	192
Prototype Development of Advanced Medium STOL Transport (AMST)	6	25	67
Development of Advanced Turbofan Engine	--	--	16

New Main Battle Tank

For the longer term modernization of the Army tank forces, the Defense Department proposes to develop a new main battle tank, now designated the XM1. This new effort replaces the XM 803 (MBT-70) tank development program which was terminated by the Congress in 1971. As a result of this action, in January 1972 the Army established a special task force to review the requirement and define performance characteristics for a tank capable of performing the Main Battle Tank mission within the guidelines and constraints laid down by Congress. After six months of analysis, the task force developed a detailed report on the performance, cost, technical risk and development schedules of various alternative configurations of a new tank. These alternatives ranged from modest product improvement programs for the current M60A1 tank to prototype development of a completely new main battle tank. After a DSARC review of the available options, the DOD has decided to initiate a program to develop a new tank, which will be more capable than an improved M60 series tank, but simpler and less costly than the XM803. The development program will take advantage of the technology, prototypes and test vehicles remaining from the U.S./FRG MBT-70 and XM803 programs, as well as knowledge and experience gained from other tank-related programs conducted in recent years.

The FY 1973 funds appropriated by Congress for a new tank program are being used to continue development of component systems that would be applicable to any future tank program. Major emphasis is being placed on armor, power train and suspension system research, development and testing. In addition, about $2 million of these funds have been used to procure a prototype power train and chassis from the FRG's Leopard II for test and evaluation.

The $52 million requested for FY 1974 would support the start of prototype development of the XM1 by two competing contractors. Each contractor would build one prototype tank, as well as vehicles to test mobility and vulnerability. Test and Evaluation of this hardware would provide the basis for a decision on whether to proceed with full-scale development.

Mechanized Infantry Combat Vehicle (MICV)

The MICV is a new fighting vehicle planned to replace the M113A1 armored personnel carriers in Europe-oriented mechanized

infantry battalions. Requirements call for a fully tracked, lightly armored vehicle, designed to provide the mobility and firepower needed to support the mechanized infantry squad in both mounted and dismounted combat. It would carry 12 occupants at speeds up to 45 MPH, and its primary armament would be the new BUSHMASTER gun. The FY 1974 Budget request includes $10 million to continue development of this system.

TOW and DRAGON

Deployment of the TOW anti-tank missile system has been underway in Europe since 1970, but changes in the procurement plan and diversion of equipment to Southeast Asia have delayed the process. The Army now plans to equip all of its forces in Europe over the next few years. The TOW will replace the 106mm recoilless rifle in the heavy antitank/assault role. It provides a significant improvement in range, accuracy and lethality. Competitive procurement for both launchers and missiles has realized a significant reduction in unit costs.

The DRAGON is a lightweight, man-portable antitank system, designed for use by forward ground combat elements. It will replace the 90mm recoilless rifle as the Army's medium antitank/assault weapon. DRAGON is a command to line-of-sight missile that is automatically guided to the target by electronic commands transmitted along a wire link to the missile. Initial operational testing of this system has been completed.

The Army recently decided to introduce competitive procurement into the program, and efforts are in progress to qualify a second procurement source by FY 1975, and significant price savings are anticipated. Funds have been requested for this system in FY 1974 both to procure hardware and to lay the groundwork for competition in subsequent procurement.

The FY 1974 Budget includes $137 million for development and procurement of the TOW and DRAGON systems.

LANCE

Procurement of the LANCE surface-to-surface missile to replace the aging HONEST JOHN and SERGEANT systems has been underway since FY 1971. Nuclear LANCE will provide our ground

forces in Europe with considerably greater mobility, responsiveness and survivability than the two systems it is replacing. These improved characteristics will allow the Army to replace HONEST JOHN and SERGEANT battalions with LANCE on a less than one-for-one ratio.

The funds needed to complete development of a non-nuclear warhead for LANCE were provided by the Congress in FY 1973, with the stipulation that DoD submit a new cost effectiveness study of this program before the new warhead is procured. This study is now expected to be completed in April 1974. Accordingly, no funds have been requested in FY 1974 for procurement of this warhead. The budget does include $85 million for procurement of nuclear LANCE.

Acquisition of the Improved HAWK

A total of $139 million is included in the FY 1974 Budget for the acquisition of another increment of the Improved HAWK surface-to-air missile. These funds will finance procurement of a substantial quantity of missiles for use by both the Army and the Marine Corps.

SAM-D

For the longer range modernization of the SAM forces, $194 million is included in the FY 1974 Budget to continue development of the SAM-D. This system is being designed to replace the Army's aging NIKE HERCULES air defense system, and eventually the Improved HAWK system. The current systems are limited to one or two engagements per battery and thus are susceptible to saturation, while SAM-D will be designed to engage a significantly greater number of targets simultaneously. Moreover, SAM-D will be designed to maintain its effectiveness in intense electronic countermeasures environments that would degrade the performance of the current systems.

FY 1974 will be the peak year for funding engineering development of SAM-D. The FY 1974 funds will finance initial missile flight testing and preparations for future test programs. The first prototype missile tests are scheduled for mid-1974.

TOW-COBRA Modifications

For the near-term modernization of its attack helicopter force, the Army proposes to start procurement in FY 1974 to retrofit the COBRA to use the TOW antitank missile system. The budget request includes $64 million for the modification of the first increment of helicopters. Eight COBRAs are now being modified, and sufficient testing should be accomplished on these helicopters during FY 1973 to warrant the start of full scale retrofitting in FY 1974.

Recent combat experience with an airborne TOW system in SEA has been excellent. Moreover, a joint field test utilizing a simulated TOW system, which was recently completed in Europe, indicates that this system could be successful if deployed defensively in that theater.

Advanced Attack Helicopter (AAH)

For the longer range modernization of the attack helicopter force, the Army now proposes to develop a new Advanced Attack Helicopter (AAH). This program is a follow-on to the Cheyenne development program which was terminated last year.

The Army attack helicopter program in recent years has been deeply involved in the debate over the close air support mission. This mission has been studied extensively in the last two years, both by the Defense Department and by the Congress. In a report issued in June 1972, the Special Subcommittee on Close Air Support of the Senate Armed Services Committee concluded that there is a place for both fixed wing and attack helicopter close air support on the battlefield. The Subcommittee reviewed certain key issues raised by the June 1971 DoD report on close air support, such as the vulnerability of the fixed wing AX to anti-aircraft fire, the vulnerability to ground fire and the target acquisition capability of the attack helicopter, and the sortie capability of the fixed wing V/STOL AV-8A HARRIER. The Subcommittee recommended the continued development of the AX, the continued limited procurement of the HARRIER, and the development of a more capable attack helicopter.

During the past year, the Army examined the handling qualities, weapons accuracy, avionics performance and human engineering of several prototype attack helicopters. An Army task force reviewed the operational requirement for an advanced attack helicopter and reported on the performance specifications, cost, risk,

and effectiveness of alternative approaches. The alternatives considered included product improvement of the Cobra, a helicopter based on the design of existing prototype aircraft, and prototype development of a new helicopter based upon realistic performance requirements. The alternative proposed by the Army was development of a new prototype which would be smaller, more agile, less complex and less costly than the terminated Cheyenne. The DoD approved this alternative and directed that a design-to-cost approach be applied to the new development program.

Requests for Proposals have been released to industry, and the Army hopes to award a development contract in June 1973. Depending upon the evaluation of the responses from industry, either two contractors will be selected to develop prototypes to compete in a fly-off evaluation, or a single development contract will be awarded if one proposal is clearly superior to all others.

The $49 million requested in FY 1974 for this weapon system, as well as the $20 million appropriated for FY 1973, would be used for the early development work on the proposed new prototype helicopter. The interested Congressional committees will be briefed and consulted on the specifics of the proposed program before these funds are obligated.

Utility Tactical Transport Aircraft System

For the longer term modernization of its assault helicopter force, the Army is developing the Utility Tactical Transport Aircraft System (UTTAS), which would replace the UH-1 helicopter in this role in the 1980's. The UTTAS would be the Army's first assault helicopter capable of carrying an entire Army squad. Its mission would be to transport combat troops and their organic equipment, resupply those units while in combat, and perform the aeromedical evacuation and other combat support missions.

Competitive prototype development of UTTAS is being conducted by two contractors, and $109 million has been requested in FY 1974 to continue this effort. The contract for the engine development was awarded in March 1972, and the airframe contracts were awarded last August. The current development schedule calls for preliminary flight rating tests of the engine in mid-1974, and the first flight of a prototype aircraft is expected to take place before the end of that year.

Heavy Lift Helicopter (HLH)

The Heavy Lift Helicopter (HLH) is being designed to lift about 22 1/2 tons, more than twice the payload of the largest helicopter currently in the U.S. inventory (the CH-54, which will lift approximately 10 tons). The $60 million included in the FY 1974 Budget for this program will support continued development work on the critical components (rotor, transmission, drive system, flight control system, cargo handling system) needed to develop a tandem rotor helicopter. A propulsion system test stand for dynamic testing of critical components is scheduled to begin full operation in January 1974. Flight testing of a single, austere HLH prototype is now scheduled for FY 1975. Testing of this prototype should resolve many of the technical uncertainties about the major components being developed, before work on subsequent phases of the program proceeds.

Modernization of Reserve Ground Forces Components

Significant progress has been made in recent years in equipping and modernizing the ground forces reserve units. In FY 1972, for example, the Army Reserve Components received $1.05 billion in equipment. This compares with $150 million in FY 1969, $300 million in FY 1970, and $727 million in FY 1971. Issues in the first half of FY 1973 amounted to almost $300 million. This equipment included modern items across the entire spectrum of the Army inventory.

The increased issues of equipment and modernization of the Reserve Component inventory have improved considerably the potential for realistic training. There are still not enough full-time personnel available, however, to manage and maintain adequately the greater quantities of modern equipment and to train other unit members in its use. Furthermore, additional equipment is required to bring all units to authorized training levels and to replace older, outmoded equipment which has been a detriment to higher levels of readiness for many years.

Associated with the equipment program is the requirement to provide adequate storage and maintenance facilities as well as field training areas. In 1970 the Department approved a ten-year facilities improvement program with the goal of providing adequate facilities for all units by the end of 1980. The budget for the first three years (FY 1971-73) provided the

Army $167.5 million, which will finance 20 percent of the construction needed. The program is continuing at a rate which will ensure that a balance is maintained between facilities and the increasing inventories of more modern equipment.

2. Tactical Air Forces and Modernization

The tactical air forces programmed for end FY 1974 will include 68 active fighter/attack squadrons (21-5/6 wings) and 37 Reserve component squadrons in the Air Force, 70 active fighter/attack squadrons (12 wings) and 10 Reserve squadrons in the Navy, and 25 active squadrons (three wings) and 9 reserve squadrons (one wing) in the Marine Corps. In addition, the Air Force, Navy and Marines will operate a total of 29 active and ten reserve reconnaissance squadrons.

The tactical air forces during the next five years are programmed to undergo a substantial modernization, only one increment of which is reflected in the FY 1974 Budget.

F-4E and MAVERICK

The $100 million requested in FY 1974 for the F-4E would provide 24 new aircraft for the Air Force. These aircraft will have the new leading edge slats which should significantly increase their maneuvering capabilities in air-to-air combat. Another 719 F-4Es procured in previous years will also have, or will be modified to incorporate, these slats.

The FY 1974 Budget also includes $112 million for the procurement of 6,000 MAVERICK air-to-ground missiles, twice the number procured in FY 1973. The acquisition of a substantial inventory of these missiles will provide a major improvement in the antitank capabilities of the Air Force.

Acquisition of the F-15

For the longer term modernization of the tactical force, the Air Force is developing the F-15 air superiority fighter.

This aircraft is specifically designed to excel in air-to-air combat and is expected to have excellent maneuverability -- a vital factor in close-in air-to-air combat. The F-15 should be superior to any fighter the Soviet Union is likely to field in the late 1970s and early 1980s. The first three squadrons are now scheduled to become operational in the mid-1970s.

Test results to date have been generally very satisfactory, and the outlook is encouraging. All of the major airframe subassemblies have been structurally tested. Moreover, the early flight tests of the aircraft have been successful, demonstrating initial aircraft performance, and flight testing is well ahead of schedule. All milestones have been met to date, except for completion of the military qualification endurance test of the engine, which has been delayed because of a failure in the test engine. After investigation this test is being resumed, but there probably will be a delay of about two to three months in the achievement of this milestone. This delay is not expected to affect the aircraft production schedule. It will be necessary, however, to keep the engine test program under close scrutiny, and the Committees will be informed promptly if any further problems arise. Further flight testing of the aircraft this year will be oriented toward expansion of the flight envelope and towards added avionics integration performance, before the production rate is increased.

The current plan is to increase the production rate from the three per month, financed in FY 1973, to 11 per month by the end of the FY 1974 funded delivery period. This plan requires the procurement of 77 aircraft in FY 1974, and $918 million has been included in the budget for this purpose. The RDT&E request also contains $230 million to continue development of the F-15 aircraft, engine and avionics. The option for the first production quantity of 30 aircraft was exercised at the end of February, 1973, but with the proviso that the aircraft contract would be financed on a partial allotment basis until the engine qualification endurance test is successfully completed.

Acquisition of the A-10

The second major program for the longer term modernization of the Air Force tactical force is the A-10, formerly the A-X.

The A-10 has been specially designed to incorporate in a low cost airframe the characteristics that are essential for close air support -- such as maneuverability, responsiveness, lethality, survivability, long loiter time and simplicity. The A-10 will be capable of high sortie rates and large ordnance payloads, and it will be able to operate effectively from unimproved air strips as short as 1200 feet. The aircraft will also have sufficient fuel aboard to remain airborne near the battlefield for several hours.

After a careful review of the available information on the major issues relating to the A-10, the Air Force has awarded a contract to Fairchild Industries, the winner in the A-X prototype competition. The contract provides for engineering development of the A-10, fabrication of 10 full-scale development models of the A-10 (plus fatigue and static test articles), and an initial procurement option for 24-72 production aircraft. In addition, a parallel contract has been awarded to the General Electric Company for 32 engineering development engines for the first 10 A-10 aircraft (the engine will be a modified version of the TF-34 used in the Navy's S-3). This contract also includes an initial procurement option for 62-186 production engines. The first of the ten R&D aircraft would be delivered in December 1974, at which point flight testing of the full-scale development model of the A-10 would begin. Meanwhile, the Air Force will continue with its testing of the two Fairchild prototype aircraft and the two competitive versions of the 30mm gun, which is an important element in the armament of the A-10.

The FY 1974 Budget includes $112 million for the A-10 aircraft and engine development programs, and $30 million for the procurement of long leadtime items for the first 26 production aircraft (and related engines), now scheduled for procurement in FY 1975.

Lightweight Fighter

Prototype development of two experimental versions of a low-cost visual combat, "lightweight" fighter aircraft is also continuing. Two contractors are building two prototype aircraft each, to investigate different high risk technological innovations. In addition, a new engine is being developed for one of the new designs. The "lightweight" fighter is being designed to an average unit production or "fly away" cost goal of $3 million per plane (in FY 1972 dollars). This prototype effort should help us obtain better information on the costs and operational suitability of such an aircraft. A total of $48 million has been requested for this program in the FY 1974 Budget.

Procurement of the F-4J, AV-8A and A-4M

Three aircraft types are proposed for procurement in FY 1974 for the modernization of the Marine Corps air wings.

The $131 million requested for the F-4J is the first increment of a four-year program, totalling 138 aircraft, designed to replace the over-age F-4Bs in the Marine Corps inventory. These F-4Js will be equipped with leading edge wing slats and the AWG-10A missile control system (with a new digital computer and a better radar), which will significantly improve their safety and performance in the close-in fighter and air-to-ground combat roles. The FY 1974 request is for the procurement of the first 10 aircraft and advanced procurement of long leadtime items for the FY 1975 increment.

The $58 million requested in FY 1974 for the AV-8A HARRIER is for the procurement of the last 12 aircraft of the currently planned three squadron program. The last of the tests recommended in June 1971 for the HARRIER by the DoD Close Air Support Senior Review Group has been completed. These tests, conducted under simulated combat conditions, showed that the HARRIER can be expected to meet or exceed the sustained sortie rate requirements.

The $69 million requested for the A-4M in FY 1974 is the first increment of a three-year program, totalling 72 aircraft, designed to replace the remaining older model A-4s in the Marine Corps inventory. The FY 1974 request is for the procurement of 24 aircraft and advanced procurement of long leadtime items for the FY 1975 increment.

A-6E and A-7E Aircraft

The Navy's attack aircraft modernization goal is to attain, by 1980, a force composed entirely of A-6Es and A-7Es.

Of the $149 million included in the FY 1974 Budget for the acquisition of the A-6E, $139 million is for the procurement of 15 aircraft and some long leadtime items for the FY 1975 increment, and $10 million is for R&D. In addition, the Navy will continue its program to modify existing A-6As to the A-6E configuration.

The $190 million requested for the A-7E in FY 1974, includes $185 million for the procurement of 42 aircraft and $5 million for R&D.

E-2C and EA-6B Aircraft

The $165 million included in the FY 1974 Budget for the E-2C airborne early warning aircraft will provide for the procurement of the last nine units, thus completing the modernization of this element of the Navy's tactical air forces. The Navy will also continue the acquisition of the EA-6B electronic countermeasures aircraft. The $135 million requested for FY 1974 is for the procurement of six more EA-6Bs.

F-14 and PHOENIX

For the longer term modernization of its fighter forces, the Navy would continue to acquire the F-14 aircraft and the associated PHOENIX air-to-air missile system. Two Navy Preliminary Evaluations (NPE) and an initial Operational Evaluation of the F-14 have been successfully completed. Aircraft #21 has been delivered to the Readiness Squadron for fleet squadron training. The Board of Inspection and Survey (BIS) Trials are now underway, and final Operational Evaluation will follow. The first two fleet squadrons of F-14As are now undergoing training and are expected to become operational this summer.

In March 1973, Grumman agreed to build the 48 F-14A aircraft in Lot V (FY 1973 funding) under the terms of the original contract, thus bringing the total number of aircraft under contract up to 134. Since it is no longer possible for Grumman to manufacture F-14s at the contract price without incurring prohibitive losses, the Government has agreed not to exercise its option for Lot VI procurement (48 aircraft) in FY 1974. Future F-14 procurement, beyond the 134 aircraft ordered through Lot V, will be based on individually negotiated contracts dependent upon Congressional authorization and appropriations.

The $633 million requested in the FY 1974 Budget includes $572 million for the procurement of 48 aircraft and long lead-time items for the same quantity in FY 1975, $57 million to continue development of the F-14A and B aircraft, and about $3 million for the construction of specialized military facilities. This program is now being reassessed by the Defense Department, and a modified procurement request will be presented in the near future.

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The PHOENIX missile system is essentially on schedule. The first F-14/PHOENIX firing against a live target occurred in June 1972. In December 1972, a multiple, four missile launch was successfully executed, with four calculated kills, one being a direct hit. The overall success rate, based on 59 test and evaluation firings against realistic targets, is 76 percent. The PHOENIX missile is expected to become operational with the F-14A this summer. The $98 million requested for FY 1974 includes $96 million for the procurement of another increment of missiles, and $2 million for R&D.

Reserve Tactical Air Forces

Continued progress is being made by the Air Force, Navy and Marine Corps in modernizing their reserve tactical air forces.

The major improvement planned by the Air Force in FY 1974 is the introduction of the A-7 into the Air National Guard inventory. Additional modernization is also planned for the fighter units as more F-4s become available from the active force. By end FY 1978, most of the older fighter/attack aircraft will have been replaced by F-105s, F-4s and A-7s.

In the Navy and Marine Corps air reserve units, most of the older fighter/attack aircraft will have been replaced by F-4s, A-7s and newer model A-4s by end FY 1978.

3. Naval Forces and Modernization

As in the case of the ground and air forces, a major effort is now underway to modernize the general purpose fleet. By end FY 1974 the active fleet will consist of 15 aircraft carriers, a total of 164 cruisers, frigates, destroyers and destroyer escorts, 62 nuclear and 12 diesel-powered attack submarines and more than 60 amphibious ships of various types. In addition, there will be 37 Naval Reserve Force destroyers in commission. Beginning in FY 1975, the decline in active naval forces from the Vietnam peak in 1968 will be reversed as new ships join the fleet at a faster rate than the older ships are retired.

Aircraft Carriers

The 15 active fleet aircraft carriers planned for end FY 1974 will include 10 FORRESTAL-class or larger, three MIDWAY-class and two older ships. The second nuclear-powered carrier, the NIMITZ,

has been launched and is scheduled to be delivered to the fleet during FY 1974. This ship is now expected to cost about $635 million. The second NIMITZ-class ship, the EISENHOWER, is now under construction and is about one-quarter complete. Delivery of this ship is scheduled in 1975, and it is now estimated to cost $679 million.

Some $299 million was appropriated in FY 1973 for long lead-time components for the fourth nuclear carrier, the CVN-70. Another $657 million is requested in FY 1974 to complete the funding of this ship, bringing the total estimated cost to $956 million. The CVN-70 will be essentially a repeat of the NIMITZ design, but it will be delivered with certain minor modifications for support of aircraft that will be in the fleet in the 1980s, as well as those needed to support ASW operations. (The Navy's CV concept requires the carriers to operate in both the attack and ASW roles in the future.) The Navy believes that these changes can be accommodated within the current end cost estimate of $956 million.

Progress is continuing in implementing the CV concept. It involves relatively minor modifications to the large carriers to provide them with the capability to conduct air ASW operations, in addition to performing the attack mission, which was previously the primary one. This flexibility will substantially increase the options available for the employment of the carrier force. Three of the carriers will be operated as CVs during FY 1974.

Other Surface Combatants

Several important programs for improving and modernizing the other surface combatants are being continued. The most important is the new SPRUANCE-class DD-963 destroyer, 30 of which are being built by Litton Industries. Sixteen of these ships were funded in FY 1970-1972, and $610 million was requested in the FY 1973 Budget for seven more. The DD-963 program, however, may be delayed by the difficulties encountered in the construction of the LHA amphibious assault ships, which are being built in the Litton shipyards ahead of the DD-963s. For this reason, the Congress provided only long leadtime funding, in the amount of $247 million, for the seven DD-963s requested in the FY 1973 Budget. The $591 million requested for FY 1974 includes $388 million now needed to complete the fundings for these ships, $198 million for advance procurement of long leadtime items for the last seven ships (which would be fully funded in FY 1975) and $5 million for outfitting and post delivery costs.

The FY 1974 Budget also includes $187 million for the conversion of two DLGs and one DLGN. The two DLGs will receive more modern AAW (i.e., ship-to-air) weapon systems and other new equipment. The DLGN, in addition to the recoring of the reactor, will receive a variety of more modern equipments.

Several programs are underway to improve the weapon systems of our surface combatants. In addition to the STANDARD and BASIC POINT DEFENSE missile systems, which are now being installed on surface ships, and the introduction of the NATO SEA SPARROW surface-to-air missile system, a number of other systems are under development or are approaching the production stage. Two of these, the STANDARD surface-to-surface missile and HARPOON, are antiship missiles for which a total of $98 million is requested in FY 1974. Of that amount, $12 million is for the continued development of the STANDARD surface-to-surface missile. The balance of $86 million is for the HARPOON -- about $67 million to continue development and $19 million for advanced procurement.

Also included in the FY 1974 Budget is $31 million for the CONDOR air-to-surface missile, which is being acquired primarily for antiship use. Of that amount, $8 million is for continued development and $23 million is for the procurement of another quantity of missiles.

For the longer term modernization of the AAW capabilities of the surface fleet, development is continuing on the new surface-to-air missile system, AEGIS, which would utilize an improved version of the STANDARD missile. The FY 1974 Budget includes $43 million to continue the development of this system.

The FY 1974 Budget also includes funds for four new surface ship programs that should make an important contribution to the Navy's future sea control capabilities. These are the Patrol Frigate (PF), the Sea Control Ship (SCS), the Patrol Hydrofoil Missile Ship (PHM) and the Surface Effect Ship (SES). All of these programs will emphasize the design-to-cost concept to ensure that they can be accommodated within fiscal constraints.

The basic objective of the Patrol Frigate program is to build an effective escort ship that is smaller and cheaper than the current frigates and destroyers, so that it can be purchased

in adequate numbers. It is expected to be a gas-turbine propelled ship of about 3,500 tons that is capable of defending convoys, amphibious forces and underway replenishment groups from air and submarine attack. The lead ship was funded in FY 1973. The current estimate of its cost is $202 million (plus about $2 million of R&D costs), which is an increase of about $11 million over the estimate of a year ago. The increase is associated with the acquisition of additional test and evaluation equipment for the lead ship. Under the current plan, the first increment of seven follow-on ships would be procured in FY 1975, and $7 million has been requested in FY 1974 for advance procurement for these ships.

The Sea Control Ship will be a relatively small (about 14,000 tons) ship carrying a mix of helicopters and vertical and short take-off and landing (V/STOL) aircraft. Its primary mission will be the protection of underway replenishment groups, amphibious groups, convoys and those task groups which will not have carriers in company.

Development and contract design of the SCS is being undertaken with RDT&E funds provided in FY 1973. The FY 1974 Budget includes $29 million of procurement funds -- $15 million for detail design, and $14 million for advanced procurement of long leadtime components. The currently approved schedule will permit careful evaluation of the concept and design before a contract is let for the lead ship. The general concept, configuration and air group composition of the SCS will be evaluated in operational tests conducted with the interim SCS, the amphibious assault ship USS GUAM.

The PHM is a missile-carrying hydrofoil ship designed to operate primarily in enclosed and coastal waters. It will be armed with the HARPOON surface-to-surface anti-ship missile, as well as guns, and will be able to operate at much higher speeds than conventional ships. Two lead ships are now being built with RDT&E funds, and these will be tested in 1974 and 1975. The FY 1974 Budget includes $28 million for this program -- $24 million of R&D funds for work on these ships, and $4 million for advance procurement of guns to be installed on the first six follow-on ships. These six ships are now scheduled for procurement in FY 1975, but this program will be reviewed by the DSARC before work on the production follow-on phase begins.

The Navy has been testing relatively small Surface Effect Ships for several years. The ultimate objective is to apply the test results to the design of larger surface effect ships, which offer the promise of a big increase in surface ship capability. At the present time the Navy is continuing tests of two 100-ton experimental craft that are designed to operate at speeds of approximately 80 knots. At this stage, the purpose of the tests is to verify or adjust the techniques used to design craft of this type. Competitive efforts to produce preliminary designs for two mission-equipped 2,000 ton SES prototypes are now in progress. If these prototypes are successful, ships large enough for open ocean operations should be entering the fleet by the early 1980s. The FY 1974 Budget includes $73 million for continued testing of the two 100 ton craft, the detailed design of the 2,000 ton prototypes, and for the full-scale engineering development of the principal subsystems (e.g., propulsors, transmissions and lift fans).

The upgrading of Naval Reserve surface combatant forces would also continue as more modern destroyers replace older ships. During the past year the Naval Reserve Force was improved by the replacement of ten older destroyers with more capable ships retired from the active fleet. Improvements in FY 1974 include the replacement of four destroyer escorts by larger destroyers, and the addition of two more destroyers and three more ocean minesweepers. Further improvement is planned for future years.

Attack Submarines

At the end of FY 1974, the Navy will have a total of 74 operational attack submarines, 31 fewer than at end FY 1968. This sharp decline in the total submarine force, however, is offset in large measure by the substantial increase in nuclear-powered submarines -- 62 planned for end FY 1974 compared with 33 at end FY 1968.

Beginning in FY 1975, the downward trend in the number of operational attack submarines will be reversed as the new 688-class SSNs start to enter the force. This program is probably the largest and most important attack submarine modernization effort ever undertaken by the U.S. Navy. The new 688-class SSN will be quieter and faster than the best of our current SSNs,

and will have better sonar performance and other operating characteristics. Moreover, it will have a propulsion core life of over ten years.

Twelve 688-class SSNs have been placed under contract, and six more were authorized in FY 1973. A total of $922 million is included in the FY 1974 Budget for the 688-class SSN program -- about $792 million for five more submarines (in addition to the $125 million in advance procurement funds provided last year) and $130 million of advance procurement funds for the five submarines planned for procurement in FY 1975.

The 688-class SSNs are currently being built by the Electric Boat Division of General Dynamics and by Newport News. These same two shipyards will also be involved in the construction of the TRIDENT ballistic missile submarines and this will have a substantial impact on their workload. Navy studies to date, however, indicate that the two shipyards will still be able to accommodate the five a year 688-class SSN program, as well as the planned TRIDENT program, provided they can accomplish the necessary buildup in their work force.

The MK-48 torpedo is now being procured for all SSNs and should provide a significant improvement in their attack effectiveness. During the past year and a half the Navy conducted a thorough operational evaluation of the MK-48 torpedo and the system is now approved for Service use. Quantity procurement of the MOD 1 version was begun in FY 1972 and delivery to the Fleet is now underway. Production of the torpedo is continuing on schedule. A total of $191 million is included in the FY 1974 Budget for this program -- $182 million for the procurement of 500 MK-48 torpedoes and about $9 million for R&D and other costs.

For the longer term improvement of the anti-surface ship capabilities of the attack submarine force, an encapsulated version of the HARPOON missile (for submerged launch) is being developed. Developmental testing has begun and the feasibility and engineering adequacy of the capsule has been demonstrated in two successful launches of HARPOON shapes. Some $12 million is included in the FY 1974 Budget to continue development of this version of the HARPOON.

ASW Aircraft

Two programs are now underway to modernize the Navy's ASW aircraft forces -- the new P-3C land-based patrol aircraft and the new S-3 carrier-based aircraft. Both of these aircraft have much better sensors and much more ASW effectiveness than the aircraft they are scheduled to replace. In addition, the implementation of the Navy's CV concept is providing added flexibility in the employment of the sea-based ASW aircraft.

The first two squadrons of the new S-3 are scheduled to be introduced into the fleet in FY 1974, replacing some of the older S-2s. The S-3 development is essentially completed, and the test program is continuing on schedule. All milestones have been met thus far, and the first lot of 13 production aircraft (procured in FY 1972) is currently under fabrication.

Procurement of 42 more aircraft was proposed in FY 1973, and the Congress provided funds for 35. The Conference Report on DoD Appropriations, however, stipulated that no FY 1973 procurement funds were to be obligated until the program had been thoroughly re-evaluated and the Secretary of Defense assured the Appropriations Committees in writing that proceeding with the procurement program could be fully justified. This requirement has now been met: the Committees were informed in a letter dated March 7, 1973, that the S-3 program has been reviewed once again, and that the S-3A program as now structured by the Navy is fully cost effective in terms of force mixes across the full spectrum of ASW missions and capabilities. Accordingly, release of funds has been authorized to enable the Navy to procure 35 aircraft in FY 73 and to provide long lead funding for 45 aircraft in FY 1974.

A total of $546 million is included in the FY 1974 Budget for the S-3 program -- $487 million to complete the procurement of 45 aircraft, $54 million for advance procurement of long leadtime items for the FY 1975 buy, and $5 million for R&D.

The funds provided for the P-3C program through FY 1973 will provide sufficient aircraft to equip nine squadrons. The $156 million requested for FY 1974 includes $147 million for the procurement of 12 more aircraft to equip the tenth squadron and $9 million for advanced procurement.

As the more capable P-3Cs replace the older P-3A aircraft in the active forces, these latter aircraft are transferred to the Reserve to replace the obsolescent P-2 aircraft. By the end of FY 1974, four of the twelve Reserve squadrons will have been converted from P-2s to the P-3A aircraft. Additional Reserve squadrons will be equipped with the P-3A as these aircraft are released from the active force.

Undersea Surveillance Systems

The FY 1974 Budget includes a total of about $125 million for three different undersea surveillance systems -- Sound Surveillance System (SOSUS), Towed Array Surveillance System (TASS), and the Moored Surveillance System (MSS). SOSUS is the principal and oldest system; TASS is a new mobile, ship deployable system; and, MSS is a new quick response, air deployable system.

4. Mobility Forces

Forward deployments of U.S. general purpose forces in peacetime are still an essential part of deterrence, but most of our forces are based in the United States. Consequently, the United States must have a capability to deploy promptly additional forces to cope with aggressions which cannot be met by local and U.S. deployed forces alone. This is the primary mission of the strategic mobility forces. These forces, in effect, enable the United States to make its contribution to deterrence with fewer forces stationed overseas. In addition, an airlift capability is needed to enhance mobility within the theater. This is the mission of the tactical airlift forces.

Strategic Airlift

U.S. strategic airlift resources, as presently programmed, should provide the basic capability needed to meet deployment requirements through the 1970s. The buildup of the C-5 force will be completed by the end of FY 1973. The active strategic airlift force will then consist of four squadrons of C-5s and 13 squadrons of C-141s. In addition to these military assets, U.S. strategic airlift capabilities include approximately 300 long range commercial aircraft in the Civil Reserve Air Fleet (CRAF).

As has been noted in past years, production of the C-5 aircraft is being completed on a cost reimbursable, fixed-loss basis, under a restructured contract. An additional $43 million is included in the FY 1974 Budget to finance the costs of those aircraft.

Improvements have been made during FY 1973 in the aerial port system. The mobility forces now have improved facilities, and the airlift system can be used more effectively in support of deployment objectives.

Increasing reliance is being placed on reservists in the strategic airlift force, and the number of active duty personnel assigned to this mission is decreasing. Further reductions in the ratio of active to reserve personnel are planned in FY 1974. The Reserve Associate concept, under which Active and Reserve personnel are integrated to perform the mission and operate the same equipment, has been extremely successful in the strategic airlift role. The Reserve Associate personnel train with the active units in peacetime. When mobilized, they would provide the needed manpower to meet emergency surge requirements. By the end of FY 1974, there will be an Air Force Reserve Associate unit for each of the 17 active strategic airlift squadrons.

Strategic Sealift

In the latter half of the 1970s, the DoD strategic sealift force of dry cargo ships will be limited to three roll-on/roll-off vessels, a number of cargo and stores ships, and two Multi-Mission Ships (MMS) which are scheduled to be added to the MSC controlled fleet through a "build and charter" program. To meet wartime deployment and resupply needs, the DoD relies heavily on U.S. commercial shipping, which can be mobilized under Presidential authority. The U.S. also expects that during a NATO contingency, some of the commercial shipping assets of our NATO allies would be available for transporting U.S. forces to Europe. Talks have been going on with our allies, regarding the availability of NATO-flag vessels for such a contingency.

Military sealift requirements, capabilities and procurement underwent an extensive interagency review in the Sealift Procurement and National Security (SPANS) Study, which was completed in August 1972. The conclusions and recommendations of this study were as follows:

1. The current competitive procurement system should be retained, but with changes in procurement procedures which would reduce the likelihood of companies quoting noncompensatory rates.

2. The Federal Maritime Commission should determine what rates should be considered "detrimental to commerce" and its review of rates should challenge those which fall within that category.

3. One or two multi-mission, barge-carrying ships could be acquired to modernize the DoD peacetime controlled fleet without adversely affecting commercial operators.

4. The DoD should proceed with test and development of equipment to improve the military usefulness of containerships in contingency operations.

5. A two-stage sealift readiness program should be developed for the U.S. Merchant Marine.

6. The U.S. merchant fleet should be strengthened.

Steps have already been taken to implement some of the recommendations of the SPANS study. For example, changes have been made in the DoD sealift procurement policy to reflect the first recommendation. Contractor proposals on the "build and charter" of two multi-mission ships have been solicited and are now being reviewed. The Military Sealift Command has been asked to undertake a study of alternative means of implementing the fifth recommendation. One of the beneficial side effects of the SPANS study has been the establishment of a useful dialogue between DoD, the Maritime Administration, the Federal Maritime Commission, and industry on a range of sealift problems.

Tactical Airlift

The active tactical airlift force at end FY 1974 will be comprised of 16 squadrons of C-130E aircraft and one squadron of specialized C-130s. In addition, there will be some 37 tactical airlift units in the Air Reserve Force.
Some $192 million is included in the FY 1974 Budget for the procurement of 36 C-130H aircraft to replace airlift aircraft

transferred to South Vietnam. As the new C-130Hs are delivered to the active forces, the older C-130Es will be transferred to the reserve components.

For the longer term modernization of the tactical airlift force, the Air Force is conducting a competitive prototype development program for an Advanced Medium STOL transport (AMST). The purpose of this program is to determine the feasibility of developing an operationally useful STOL aircraft which could be procured in quantity at an average unit flyaway cost (in FY 1972 dollars) of about $7 million each, as an eventual replacement for the C-130 in the 1980s. A decision on engineering development and production of this aircraft will be made only after the prototypes have been evaluated in terms of both performance and cost, i.e., the design-to-cost approach will be an important factor in this program. A total of $67 million is included in the FY 1974 Budget to continue prototype development of the AMST.

Although existing engines can be used in the prototype aircraft, a new, more efficient engine could improve the performance and economy of the new aircraft, should a production decision be made. The FY 1974 Budget includes $16 million for competitive development of an advanced turbofan engine demonstrator that could have application to other military aircraft as well as the AMST.

MANPOWER

Manpower issues discussed in this chapter may be separated into two broad categories: first, that which relates manpower objectives, requirements, costs, and the manning of the active and reserve forces, and second, that which describes the "people programs" of the Department of Defense, to include the betterment of military life and the stabilization of manpower.

Increasingly close attention must be paid to the men and women, both military and civilian, who comprise the Department. Manpower costs account for more than half of each defense dollar. What is more, with an All-Volunteer Force, every candidate must be recruited and retained in competition with the private sector and other government agencies. Efficient management of more than 3.2 million people within foreseeable budgetary constraints will be one of the Department of Defense's main challenges in the years ahead.

A. MAJOR MANPOWER OBJECTIVES

Department of Defense manpower objectives devolve from both the Human Goals statement originally published August 18, 1969, and recently reissued to take account of the equal opportunity for women in the Armed Forces, and the need to assure the requisite number of qualified personnel to man and sustain the forces essential for national security. These objectives are:

-- To complete the transition to peacetime manpower levels while maintaining the capability to meet our national security commitments.

-- To balance manpower and other defense costs so as to maximize security within budget limitations.

-- To improve the quality of life in the military services.

These objectives must now be met in the environment of the All-Volunteer Force.

B. MANPOWER REQUIREMENTS

Requirements for manpower derive from the strategy and force structure described earlier and are elaborated upon in the Military Manpower Requirements Report for FY 1974 submitted to the Congress. Recommended manpower strengths for FY 1974 are shown in the table on the following page. A comprehensive study of future manpower requirements will be undertaken this year. By comparing the strengths recommended for FY 1974 with those of previous years, it can be seen that the numbers have been reduced. We have now reached "baseline" strength.

The table is organized by category of manpower employment. Total strengths have declined by 89,000 from FY 1972 to FY 1974. These reductions have been due in part to our disengagement from the Vietnam war, in part to more efficient use of military manpower, and in part to our acceptance of lower force levels in the near term in order to fund overdue modernization of weapon systems.

Strategic forces manpower requirements are, naturally, derivative from strategic force levels and represent about 6 percent of our total requirements. Personnel in this category man the offensive and defensive forces necessary for strategic sufficiency. Their number has been reduced over the past three years, due primarily to reductions in B-52 and air defense aircraft, headquarters activities, and the command and control structure. Thus, there is a decline of 2,000 people assigned to the strategic forces.

The largest segment of defense manpower, about 41 percent, is assigned to the general purpose forces. Strategic nuclear forces, by themselves, are not a sufficient deterrent; the security of the U.S. and protection of our vital interests require general purpose forces for forward deployment and forward defense. These land, tactical air, naval, and mobility forces are maintained for the defense of the United States and for the support of other nations to which we are linked by common interests and treaty commitments. The size of the general purpose forces is strongly influenced by our commitment to NATO, our role as a Pacific power, and the necessity of maintaining the capability to deploy forces in support of our interests.

Auxiliary forces manpower performs missions in the fields of intelligence and security, communications, research and development,

DOD MILITARY MANPOWER REQUIREMENTS
(Active Duty End Strengths in Thousands)

	FY 72 (Actual)	FY 73 (Estimated)	FY 74 (Estimated)
Strategic Forces	129	128	127
General Purpose Forces	874	929	921
Land Forces	459	522	526
Tactical Air Forces	174	171	176
Naval Forces	195	195	182
Mobility Forces	46	40	38
Auxiliary Forces	186	179	172
Intelligence & Security	72	65	62
Centrally Managed Communications	48	50	49
Research & Development	35	35	34
Support to Other Nations	10	12	9
Geophysical Activities	20	18	17
Mission Support Forces	358	336	314
Base Operating Support	258	240	222
Crew & Unit Training	41	39	38
Command	59	57	54
Central Support Forces	404	388	366
Base Operating Support	52	46	43
Medical Support	88	89	84
Personnel Support	31	28	28
Individual Training	153	151	141
Command	57	51	49
Logistics	24	22	21
Individuals	370	328	333
Transients	106	82	89
Patients & Prisoners	12	11	11
Trainees & Students	241	223	220
Cadets	10	12	12
Total DOD	2,322	2,288	2,233
Army	811	825	804
Navy	588	574	566
Marine Corps	198	197	196
Air Force	726	692	666

NOTE: Details may not add to totals due to rounding.

support to other nations, and geophysical activities. Approximately 8 percent of our military manpower is allocated to these missions.

Mission support manpower plays an important role in the accomplishment of both general purpose and strategic force missions. Much of this manpower, some 14 percent of the total, is devoted to operating the airfields, ports, and troop posts where these forces are located.

To some degree mission support forces and central support forces perform similar functions. However, they differ in regard to whom they support. Mission support forces are an integral part of primary mission forces and provide the direct services and command functions required for the effective operation of force units. Central support forces, in contrast, provide essential management and support functions on a Service-wide basis. These include base operating support, medical services, personnel activities, individual training, command support, and logistics.

There has been definite improvement in the more efficient use of support personnel in the past two years. Although total military manpower has declined by about 4 percent from FY 1972 to FY 1974, the mission support forces manpower has decreased by 13 percent while the central support forces manpower has dropped by 10 percent and now represents approximately 16 percent of total requirements.

Finally, the category of "individuals" comprises personnel who are not available to perform duties with operational units, such as transients, patients, prisoners (except for the Air Force), trainees, students and Service Academy cadets. Because these personnel are not at any given moment on the job with operational units, and because these units must be manned at authorized strengths, the "individuals accounts" are additive to force requirements and represent about 15 percent of total manpower requirements.

It is important to recognize that "individuals" are not a subset of support. In fact, shortages in the "individuals accounts" result in overall manpower shortages when the Services must draw on them to replace people in the mission and supporting force categories.

In summary, the military manpower authorization we are requesting provides for a FY 1974 active duty end strength of

2,233,000. This is the lowest military strength our country has maintained since the pre-Korean War period in early 1950. It is 452,000 lower than the FY 1964 strength, prior to the Vietnam buildup, and 1,315,000 less than the end strength just six years ago at the peak of the Vietnam war.

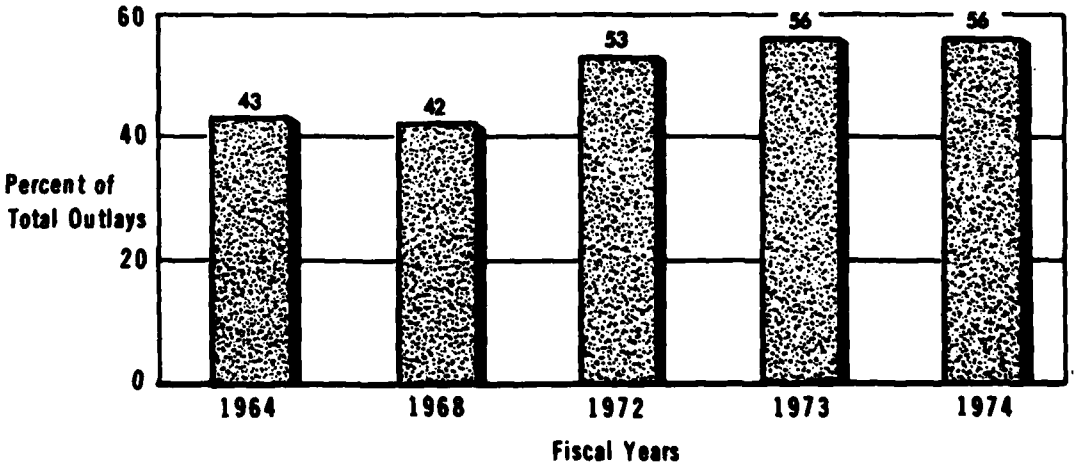
The requirements and justification for the manpower level we are requesting are more thoroughly covered in the FY 1974 Military Manpower Requirements Report.

C. MANPOWER COSTS

Although defense costs have been discussed in considerable detail earlier in this report, the issue of manpower costs is particularly important and should be highlighted here.

The following chart demonstrates that for FY 1974, the heretofore rising trend in manpower costs as a percentage of total defense costs has been stabilized.

MANPOWER COSTS AS A PERCENT OF TOTAL DEFENSE COSTS



The single largest portion of manpower costs is expenditures for active military manpower. While the Department has succeeded in stabilizing the rising trend, operational military per capita costs for FY 1973 are more than double those of FY 1964. This is a result of the decision to provide a fair income for Servicemen

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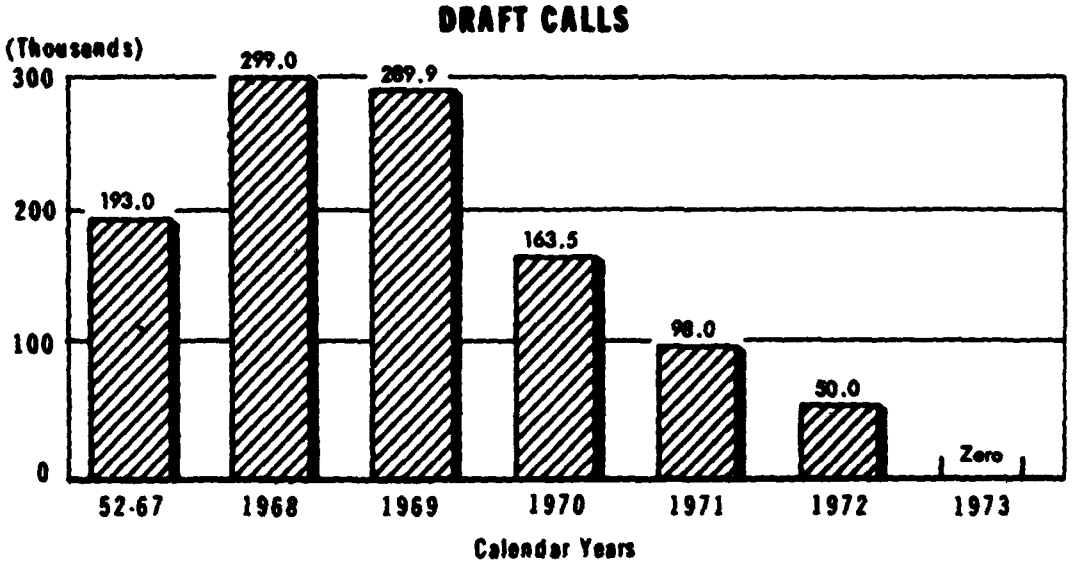
and women. As long as men were being drafted, some served unwillingly; and the difference between what these men were paid and the salary necessary to have attracted them as volunteers can be considered an imputed tax.

The pay raises since 1968 have reduced this imputed tax and have increased the proportional cost of military manpower in the Department of Defense. In FY 1974, the All-Volunteer Force will reduce the imputed tax to virtually zero.

D. MANNING THE ACTIVE FORCES UNDER ZERO DRAFT

The most tangible evidence of progress in attaining an All-Volunteer Force is the sharp decline in draft calls which has occurred since the years of peak U.S. military involvement in Vietnam. This decline can be readily seen in the following graph.



During the last half of CY 1972, 35,000 men were drafted for the Army. At the same time, voluntary enlistments -- except for medical personnel -- increased to the level where, if sustained, they will be sufficient to satisfy manpower requirements for the first half of CY 1973.

Enlistment Trends

The significant decline in draft calls was made possible by two actions; first, the attraction of more voluntary enlistees to military service, and second, a reduction of the Active force itself. The favorable trend in male enlistments for all Services, and especially the trend in true volunteers, has eliminated the need to continue inductions. The number of true volunteers increased from 59 percent in FY 1971 to an estimated 84 percent in FY 1973. With the termination of draft calls in December, virtually all current enlistees are true volunteers.

Quality of Enlistments

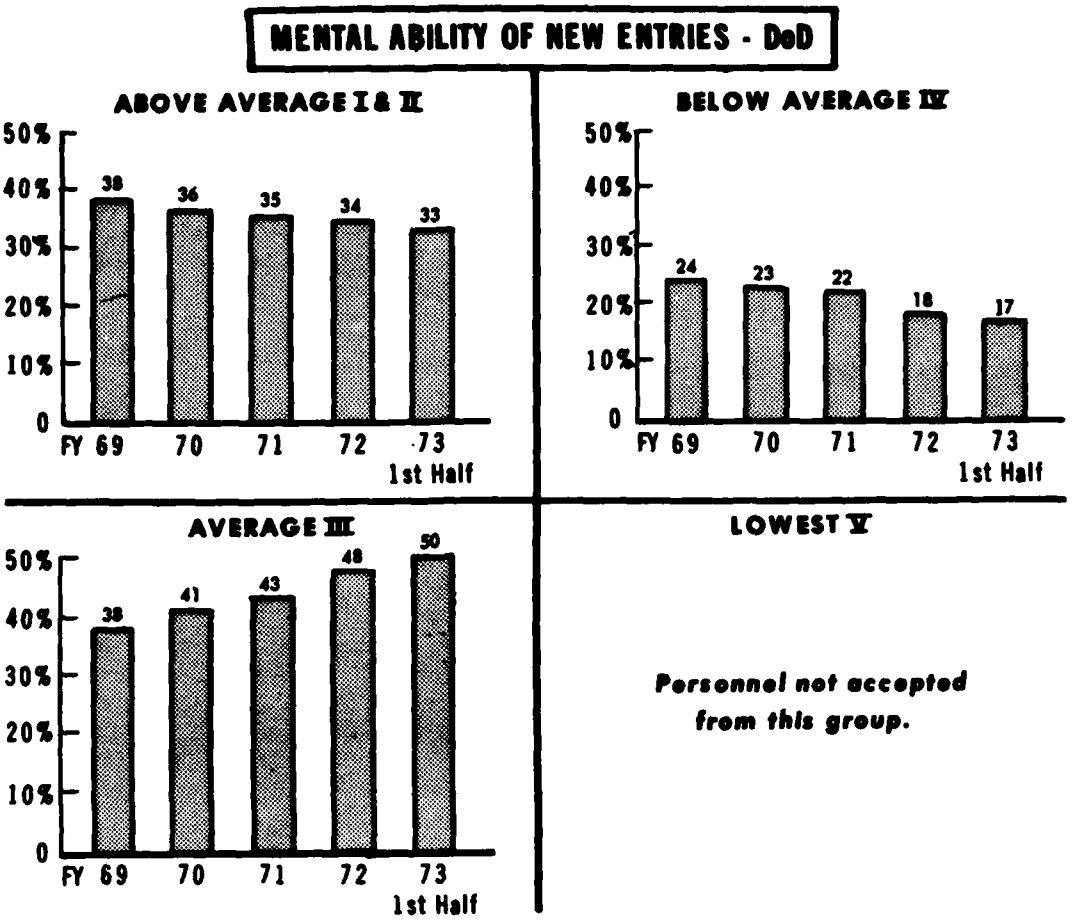
There had been predictions that ending the draft would produce an organization of substandard volunteers. Actual experience does not support this claim. The quality objectives for military enlistments are being met as well or better than during earlier periods of high draft calls. These objectives are:

-- To enlist people whose learning capacities match the requirements of military jobs.

-- To enlist people who display self-discipline and control.

-- To maintain the efficiency and effectiveness of the Armed Forces.

Because of the importance of maintaining the fine balance among the quality of the force, its mission requirements, and its costs, we monitor quality factors closely. Mental ability of people entering military service is one of these factors and data on the mental abilities of new entries is shown in the chart on the following page.



The trends in mental ability of new entries show a modest decline in men having above average mental ability coming into military service. However, the number is adequate to fill jobs requiring complex technical training and the ability to complete such training successfully. There has been a steady increase in the proportion of men entering service with average mental ability, which is adequate for most military jobs. The declining trend in Mental Group IV personnel is the result of the emphasis placed on selective recruiting. Overall, the learning capacity of new entries is adequate in meeting job requirements when the proportion of Mental Group IV personnel does not exceed about 22 percent. Conversely, when the overall proportion of Mental Group IV personnel falls below 15 percent, there is a tendency toward many people being under-challenged by their job assignments.

High school graduates have consistently performed better in their military jobs, and have had fewer disciplinary problems than those who have not graduated. Hence, special emphasis is placed on attracting a high proportion of young men who have completed high school.

Because of a sharp decline in the percentage of high school graduates among Army enlistees during the first half of FY 1973, the overall percentage of high school graduates among enlistees for all of the Armed Services combined dropped from 71 percent in FY 1972 to 63 percent in the first half of FY 1973. Starting February 1, 1973, the Army established a target of 70 percent high school graduate enlistments each month. This target is numerically equivalent to the national percentage of high school graduates within the non-college, male population of military age.

The overall goal is to obtain people who have the capacity and will to perform the required jobs in a satisfactory manner. It is not desirable to overrun the Services with young people of uniformly high learning capacities, just as it is not desirable to admit too many with limited capacities. It may be necessary to offer bonuses to attract people in sufficient numbers for the more difficult jobs, or to use reenlistment bonuses to selectively retain them. Authority for the payment of such bonuses is contained in the Uniformed Services Special Pay Act which awaits action by Congress.

Retention of Personnel

The combination of pay raises provided by Public Law 92-129, programs aimed at improving conditions of service, emphasis on career counseling, and the introduction of attractive reenlistment options reflect only some of the actions taken by the Services to increase retention of both first-term and career enlisted personnel. The Navy expects to raise first-term reenlistments to over 19,000 in FY 1973, although it had serious retention problems among its nuclear propulsion personnel prior to passage of the Nuclear Qualified Pay Act in 1972. The Army expects to achieve the projected FY 1973 total reenlistment and prior-service enlistment goal of 58,000. Retention in the Air Force is already near optimum, and the Marine Corps expects a continuation of improved retention throughout FY 1973.

There is little question that the challenges and satisfactions of military service can result in higher rates of retention through reenlistment than those experienced in recent

years. Of course, retention should be managed so as to avoid promotion stagnation and an over-aged force.

Improved, balanced retention rates not only will help us maintain strength in an all-volunteer environment by lowering recruiting needs but also will result in a more effective force. It is in our best interest to reduce excessive personnel turnover, because experienced people are more productive than new people, and a smaller proportion of our force will be employed in receiving and conducting training. Military units function best when their members serve together long enough to develop unit identification, a sense of personal security, and job proficiency. Excessive personnel turbulence undermines morale, weakens discipline, and lowers the effectiveness of the military organization. The achievement of force stability is one of our most important manpower goals.

Attracting and Retaining Critical Specialists

Although the Department of Defense has been successful in attracting more volunteers and increasing retention, we are still at a disadvantage in competing for enlistees and reenlistees whose abilities or skills command a premium wage in the open market. The Services need to attract and retain sufficient numbers of recruits who can master the complex technical training required to operate and maintain the machinery of modern warfare. Excessive turnover of expensively trained specialists lowers the effectiveness of our military units and imposes heavy repetitive training costs.

In order to cope with these special problems, authority is needed to pay enlistment and reenlistment bonuses in selected short-supply occupations in return for a commitment to serve for a stipulated number of years. These bonuses may be viewed as a prepaid wage differential based on the qualifications of the individual and the unique needs of the Services. The Uniformed Services Special Pay Act is very important in this regard. Although passed by the House during the last session of the 92nd Congress, the bill was not considered by the Senate, and has not been acted upon by the 93rd Congress. The bonus payment authorities contained in the Uniformed Services Special Pay Act are based on the 1971 Quadrennial Review of Military Compensation, which concentrated on the study of special pays. These special pay proposals are not flash ideas conceived in the pressure of ending the draft; they have been carefully considered, and are based upon years of experience with special pays in the military service.

Under existing law, an enlistment bonus of up to $3,000 may be paid to individuals who enlist for at least three years in the combat elements of the Armed Forces. Payments under this authority may not be made after June 30, 1973, unless the law is extended. We are currently offering a $1,500 enlistment bonus for a four-year enlistment in the ground combat elements of the Army and Marine Corps. Results reflect a moderate increase in combat arms enlistments and a significant increase in long term (4-year) enlistments.

However, with the advent of the All-Volunteer Force, difficulties in obtaining qualified entrants will not be limited to Army and Marine Corps combat elements. For example, reduced draft pressure is expected to create future shortages for the Navy's six-year advanced technical programs. The Air Force is currently experiencing difficulty in meeting its specialized and high aptitude skill requirements. The Uniformed Services Special Pay Act would extend enlistment bonus authority to enlisted skills which are in critically short supply. The bonus can be varied by amount and length of enlistment.

The Special Pay Act also improves our ability to retain essential personnel. It combines the most desirable features of the Regular Reenlistment and Variable Reenlistment Bonuses into the Selective Reenlistment Bonus which is much more flexible and has a higher limit. Moreover, it corrects a costly deficiency in present reenlistment bonus authority. The current Regular Reenlistment Bonus by law must be paid to all first-term reenlistees. As a consequence, approximately 25 percent of reenlistment bonuses is paid to individuals serving in skills already manned in excess of 100 percent of requirements. The unnecessary expense is about $40 million per year.

Obtaining and Retaining Sufficient Officers

The Military Services met their requirements for 36,000 new commissioned officers in FY 1972. In doing so, they drew on the supply of ROTC graduates who had enrolled in the program in previous years when draft pressure was high. Legislation which in FY 1973 increased the number of ROTC scholarships and subsistence payments has thus far been effective in abating any serious decline in ROTC enrollment.

By FY 1974, requirements for new commissioned officers will drop to about 20,000 per year, excluding medical officers. Attracting this number from the 280,000 qualified men who will graduate from colleges should not be a difficult task. In addition, the Uniformed Services Special Pay Act would provide upon enactment variable incentive pay for officers in critical specialties such as aviation, nuclear submarines, and military law.

As with enlisted women, there are many more qualified women who seek military service as officers than there are vacancies for them to fill. Increased use of women in the officer ranks will make it easier to obtain the necessary number of qualified officers.

Attraction and Retention of Aircrew Volunteers

A Department of Defense legislative proposal for revision of hazardous duty incentive pay will be introduced in the 93rd Congress. The proposal revises hazardous duty incentive pay for aviation duty as a means of enhancing attraction and retention of officer aviation crewmembers in an All-Volunteer Force environment.

Attracting and Retaining Members of Health Professions

Members of certain health professions, such as medicine, dentistry, veterinary medicine and optometry, will be especially difficult to attract and retain in an all-volunteer environment.

Only one-sixth of the physicians currently on active duty are serving voluntarily. Another one-sixth serve because of obligations incurred through medical training programs subsidized or provided by DoD. The remaining two-thirds serve because of the "doctor draft." Since the latter group serves for two years, one-third of our physician force turns over each year. The problem is made critical by two factors: first, there is a national shortage of health professionals and second, there is a large disparity between the pay of most military health professionals and their civilian counterparts. Most of the physician entries in recent years have been obtained through the draft or the draft-motivated Berry Plan. This is a program under which an intern defers his obligated military service until completion of

specialty training, a period of from two to five or more years. A number of physicians are currently in various phases of training under this program and may still be called upon to perform their military service as Reserve officers. Even assuming continued reliance on those who will be completing their deferments under the Berry Plan, there will be a shortage of 1,515 physicians by the end of FY 1976 against requirements of 11,300; without the Berry Plan there would be a shortage of 5,900 physicians by end-FY 1976.

Several important initiatives have been taken to solve the manpower problem in the health professions. Public Law 92-426, signed by the President in September 1972, provides us authority to increase the number of scholarships in the health professions in return for at least two years of active duty, thereby expanding an incentive which already has proved effective on a smaller scale. It also provides authority for the establishment of a Uniformed Services University of the Health Sciences, for which initial plans are now being drawn. The first class will graduate in 1982. However, in order to attract health professionals to military service, the disincentive of present military medical pay must be removed. The proposed Uniformed Services Special Pay Act also includes authority to increase the special pay of medical and dental officers with two years of service from $150 to $350 per month and the authority to provide retention bonuses to all critical health professionals.

Civilian Substitution

Many support jobs now filled by military men can be performed effectively and more economically by civilians. It is a policy of this Department that "civilians shall be utilized in all positions which do not require military incumbents for reasons of law, training, security, discipline, rotation, or combat readiness, or which do not require a military background for successful performance of the duties involved." During the period 1966-1968 a civilianization program affecting approximately 114,000 military positions was implemented.

In December 1972, the Military Services were instructed to initiate programs to civilianize at least another 31,000 military positions by end-FY 1974. The expanded use of this alternative source of manpower can further reduce the requirements for male recruits.

E. MANNING RESERVE FORCES UNDER ZERO DRAFT

A well-equipped and fully-manned National Guard and Reserve, deployable on short notice, is potentially the most economical part of our defense system. Their revitalization in the past several years, therefore, is encouraging. The Guard and Reserves are now relied upon as the initial and primary augmentation for the Active Forces in situations requiring the expansion of the General Purpose Forces. Consequently, equipment inventories are being replenished and modernized in each component. Training has been intensified and readiness is improving.

The Guard and Reserve portion of the Defense budget has increased from $2.2 billion in FY 1968 to $4.0 billion in FY 1973 and to $4.4 billion in FY 1974. This is the largest single-year investment in the Guard and Reserve in our nation's history.

National Guard and Reserve Strengths

While the draft was a major source of military manpower, many young men were attracted to the Guard and Reserve as an alternative to active military service. The long lists of applications for Guard and Reserve membership, characteristic of the years of heavy draft, have disappeared. And disappearing also are many draft-motivated young Guardsmen and Reservists as their obligated terms of service expire.

By June 1972, the combined National Guard and Reserve force strengths were 48,117 -- or about 5 percent -- below the Congressionally mandated minimum average strength of 972,674 at that time. In FY 1973 mandated strength increased by about 4,000 to 976,559. Despite substantial losses of reservists, by greatly increased recruiting efforts the Reserve Forces managed to end calendar year 1972 with approximately the same shortage. High losses projected over the next five months will offset most of the enlistment gains, so it is expected that there will be some shortage of Selected Reserve personnel at the end of this fiscal year.

The DoD has already expanded recruiting and associated advertising for Reserve Component enlistments. Enlistments of both men and, now in growing numbers, women are being sought. At the same time, we are assessing the number of people and units required to sustain a viable reserve force structure.

Needed Legislative Support

Nevertheless, intensified recruiting alone is not enough. We also need legislative support. A key provision of the Uniformed Services Special Pay Act is the authority to use reenlistment and enlistment bonuses for the Guard and Reserve. The bill would authorize bonuses of up to $2,200 for a critical skill or up to $1,100 for a non-critical skill for enlistments or reenlistments of six years. Plans call for testing the bonus, once authorized, at lower than the maximum allowed rates to determine the least costly bonus needed to meet manning requirements. Long experience with reenlistment bonuses in the Active Forces has been favorable. Without a draft, and in order to be effectively and fully manned, the Reserve Components need inducements similar to those which have been made available to the Active Forces.

We also need help from the Congress to correct gaps in the benefit structure and family protection provided to personnel of the Guard and Reserve. The following legislation would assist in remedying these gaps:

-- A bill which provides for health and survivor benefits for Guardsmen and Reservists who are injured or killed while on short tours (less than 31 days) of training or active duty.

-- A bill which provides full-time coverage under Serviceman's Group Life Insurance to certain members of the Ready Reserve and to members who are qualified for retirement but have not reached the statutory age of 60 when retirement compensation begins.

-- A bill which authorizes active force retirees who become members of a Selected Reserve Unit to receive both their retired pay and compensation from the reserve unit. This provision would facilitate transferring retired regular members into the Ready Reserve to meet critical skill shortages on a selected and limited basis.

Public Support of Guard and Reserve

Although the financial incentives contained in legislative proposals are important, the Guard and Reserve will still fall short of their requirements unless there is improved public understanding of their role in our nation's security. Toward this end, on June 22, 1972, President Nixon announced the creation

of the National Committee for Support of the Guard and Reserve and named Mr. J. M. Roche, former Chairman of the Board of General Motors Corporation, as its chairman.

The broad and vital charter of this national program -- to improve public understanding of the Guard and Reserve role in our nation's security system, and to enlist the cooperation of those who employ present and prospective members of Guard and Reserve components -- will receive maximum support from the Department of Defense.

F. IMPROVING THE ATTRACTIVENESS OF MILITARY LIFE

Programs for improving the attractiveness of military life are essential. The fundamental attraction of military service is enhanced by an attractive and dignified style of life. Unnecessary irritants merely sap the motivation and esprit of our service people.

Relief from Non-Military Duties

In FY 1973, the DoD relieved many servicemen and women from non-military duties such as kitchen police and janitorial duties outside their own quarters so that they could devote more time to military jobs. In FY 1974 we intend to continue this policy. Kitchen police contributes little to military skills; time spent on this task can be more profitably spent in training and other primary duties. Consequently, this service will be increasingly performed by civilians.

Housing

Adequate housing for both married and single personnel is an extremely important morale factor. While the FY 1969 budget requested only 2,000 new units of family housing, the FY 1973 budget, as amended, requested 11,939. In FY 1974 we are asking for 11,688 new units as well as authority to increase the statutory space limitations to improve the livability of new units.

Progress has been made in housing for lower income military families under the provisions of the National Housing Act. In cooperation with HUD, community housing subsidized by FHA is being made available to these lower income families on a preferential basis. Continuation of this program is contingent upon action taken by FHA as a consequence of the "freeze" on subsidized housing.

FHA has been asked for clarification, particularly in regard to our FY 1973 request for 9,045 additional units.

The Department is also approaching a goal of adequate quarters for all single military personnel both in barracks and bachelor officer quarters. From FY 1969 through FY 1973, over 137,000 new and replacement barracks spaces and more than 10,000 bachelor officer quarters spaces will have been provided. The FY 1974 program calls for constructing nearly 39,000 barracks spaces and approximately 450 bachelor officer quarters spaces. Also, in December 1971, an agreement was reached with the Federal Republic of Germany under which barracks our soldiers occupy in Germany will be extensively renovated. This program is progressing well. We will improve existing barracks at all locations as rapidly as possible. The emphasis will be on semi-privacy and enough room furnishings to provide decent accommodations at comfortable, although certainly not plush, living standards.

Education

In the field of education, the DoD continues to place strong emphasis on high school completion, remedial education, and career or vocational opportunities for all enlisted members. All in-service educational efforts have been reinforced by amendments to the G.I. Bill. Legislation enacted in 1970 created the Predischarge Educational Program (PREP). This program made special benefits available to service members needing high school completion or remedial education courses and reduced from two years to six months the time on active duty required for eligibility for in-service VA educational benefits. Recently enacted legislation further supports DoD educational goals by providing for substantially increased educational benefits and improved payment procedures.

Support for DoD overseas dependents schools is especially important for the morale of military families. The Department is continuing its efforts to provide quality education for approximately 154,000 students enrolled in these schools and another 17,400 enrolled in tuition-fee schools. The funding level planned for FY 1974 will permit dependents schools to operate at average pupil-teacher ratios comparable to those of school systems of similar size in the United States. The North Central Association of Colleges and Secondary Schools has indicated that the overall quality of these dependents schools compares favorably with the best schools in the United States.

Legal Services

In 1970, DoD instituted a test program to increase the range of legal services available to military personnel and dependents unable to pay civilian legal fees. Under this program, military attorneys, in cooperation with state and local legal officials, have provided free legal services, including representation in civilian courts, to eligible personnel. Reaction by civilian and military communities has been encouraging.

Domestic Action

Through the Domestic Action Program, the involvement of local installation commanders with their surrounding communities has been encouraged. Since 1969 this program has been expanded to include all active duty installations and over 90 percent of Reserve and National Guard units throughout the country.

During the past year, the Department again exceeded its quota for summer youth employment. It also operated special programs for Alaskan natives, Indian youths, and Neighborhood Youth Corps enrollees.

G. SPECIAL PROBLEMS: EQUAL OPPORTUNITY AND DRUG ABUSE

The past year has witnessed the important transition from plans to programs in both these fields.

Equal Opportunity

One of our key Human Goals is:

> "To make Military and Civilian service in the Department of Defense a model of equal opportunity for all regardless of race, sex, creed, or national origin, and to hold those who do business with the Department to full compliance with the policy of equal employment opportunity."

Policies and programs carried out since August 1969 have moved us much closer to achieving this goal. More will be done.

During the past year the Services have removed many of the barriers to fuller opportunities for women in the Armed Forces. Each Service has reviewed policies which unnecessarily distinguished between service personnel on the basis of sex and is

changing many of these policies as rapidly as possible. For example, the number of occupations open to enlisted women has been greatly expanded, as shown in the table below.

Career Fields Open to Women
(Enlisted)

	Percent Open to Women	
	Mid-1971	End-1972
Army	39%	90%
Navy	24%	100%
Air Force	51%	98%
Marine Corps	57%	57%

In FY 1972, 14,000 women enlisted in the four Services combined. FY 1973 goals call for enlisting 21,700 women -- an increase of more than 50 percent. Enlistment trends for the first seven months of the fiscal year indicate that the goals for women will be achieved. They are all high school graduates, or have GED equivalents, and have average or above average mental ability. By end-FY 1977, the Services plan to have twice the number of military women that they had at the end of FY 1973.

The Department also is making continuing progress in its efforts to improve race relations. The policy remains complete racial equality in the services. Some recent developments have been:

-- The Defense Race Relations Institute is now fully operational. During CY 1972 over 700 officer and enlisted students graduated from the Institute. These graduates are now back in their units serving as instructors of the Department's 18-hour race and ethnic relations course.

-- Each Service has initiated an intensive management program to insure more equitable distribution of racial and ethnic groups among occupational specialties.

-- In FY 1972, of 38,288 officers who entered the military services, 747, or 2.0%, came from minority

groups. We still have a long way to go to attain a rate of minority officers proportional to the national representation. It is one of our highest priorities.

-- The percentage of blacks in the ROTC program is now nine percent. The enrollment of blacks has been improved by the establishment of ROTC detachments at more predominantly black colleges. This number has risen from 16 in FY 1969 to 27 in FY 1972.

-- The number of blacks entering the Service Academies has increased by 86 percent in the past three years, from 90 to 167. Black representation in the officer corps will rise further as black participants in these officer programs graduate and enter service.

-- Minority enrollment in senior service schools -- the War Colleges -- has increased. Five minority officers were selected in 1970; 17 were selected in 1971; and 18 were selected in 1972. This is not a leveling off but a relative increase because the total student body was smaller in 1972 than in 1971.

-- Several members of ethnic minorities and women have been promoted to general or flag rank and assigned to command and other key positions. The Army has two black major generals, both of whom are commanding combat divisions, and seven black brigadier generals, four of whom are assigned to troop units. The Navy has one black rear admiral, who is in a command assignment. The Air Force has two black general officers -- one a major general and the other a brigadier general -- and one brigadier general selectee. There are now five women general/flag officers on active duty.

-- Programs to assist minority military personnel in the transition to civilian life have been successful in providing training in transferable skills. During the first six months of calendar year 1972, 9,300 minority personnel received skill training. Some 52,000 minority personnel received job counseling assistance. Joint programs with concerned civilian organizations, such as the National Urban League, have been effective in supplementing assistance received by minority members pending separation. Civilian organizations in addition

to the National Urban League are contemplating establishment of assistance centers for returning minority servicemen. For example, the American G.I. Forum, a Spanish American veterans organization, will create centers at 17 cities across the United States.

Drug Abuse Control

The hard drug crisis is coming under increasing control in the Armed Forces, but the size of the problem remains great. We have refined techniques to identify the drug user, and our treatment and rehabilitation programs return most drug abusers to active duty. The policy of reviewing drug-related administrative and punitive discharges has permitted more ex-servicemen to take advantage of Veterans Administration programs.

Under the Department of Defense-wide exemption policy, information about a serviceman who volunteers for treatment of drug abuse or who is found positive in a urinalysis test conducted as part of the identification program cannot be used to support action under the Uniform Code of Military Justice or lead to an administrative discharge under less than honorable conditions. This policy removes the threat of punishment so that the drug abuser who knows he needs help can identify himself and receive early treatment.

The downward trend in exemptions for drug abuse can be interpreted as a net reduction in drug usage and as an indication that urinalysis as a means for identifying the drug abuser is effective.

The Army has 36 drug treatment centers on major bases, and other treatment facilities on all Army installations.

The Navy/Marine Corps has 2 Navy drug rehabilitation centers and 30 CARE centers, all at major bases.

The Air Force has its major drug treatment center at Lackland Air Force Base, plus 160 local rehabilitation programs at bases around the world.

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Disposition of Identified Military Drug Abusers

June 1971 - June 1972

Rehabilitated and Returned to Duty	27,667	(49%)
Still Undergoing Rehabilitation (as of June 1972)	7,870	(14%)
Separated After Rehabilitation	18,382	(32%)
Transferred to VA Hospitals for Added Treatment	3,027	(5%)
Total	56,946	

The shift away from undesirable discharges for drug abusers is significant. With full implementation of the exemption program in July 1971, a Service member could no longer be administratively discharged under less than honorable conditions if his only problem was the use of drugs or the possession of drugs for his personal use and if he volunteered for treatment or was positive on a urine test conducted as part of the identification program. By receiving an honorable or a general discharge instead of an undesirable discharge, an individual is eligible for treatment by the Veterans Administration.

While identification of users of the so-called "soft drugs" remains difficult, both those who volunteer for treatment and those who are identified by other means -- such as habitual inefficiency on the job -- are also eligible for rehabilitation and treatment.

On March 1, 1972, the Department of Defense issued new policies for the prevention of alcohol abuse and alcoholism and for the treatment and rehabilitation of alcohol abusers and alcoholics. The Military Services were directed to develop programs for the treatment and rehabilitation of alcohol abusers, as well as educational programs for the prevention of alcohol abuse. Every serviceman and woman who is identified as prone to alcoholism is now offered the opportunity to participate in treatment and rehabilitation.

The services have subsequently increased the number of military alcohol rehabilitation centers worldwide. In consonance with various forms of treatment, the Navy now has four centers, the Air Force eight, and the Army treatment facilities at each major installation. The Department will closely monitor the success of these recent programs.

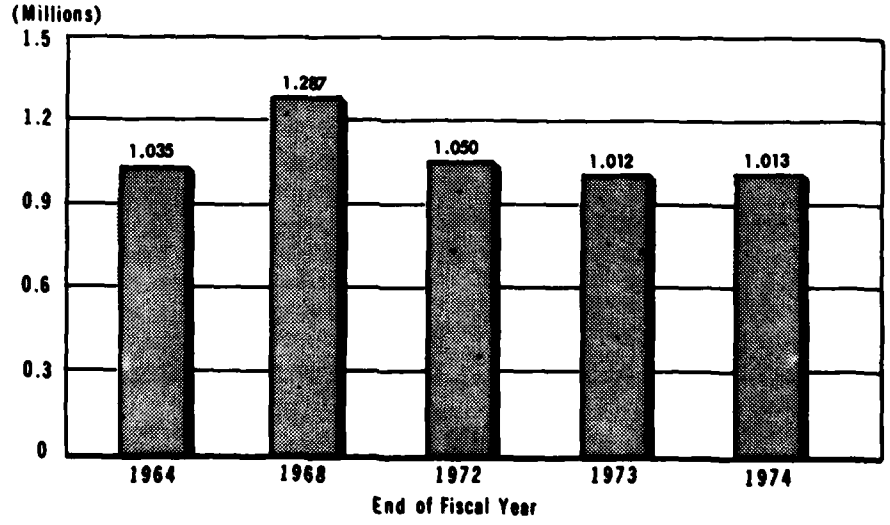
Drug and alcohol problems have not been eliminated from the Armed Services. However, we do have sound programs in operation worldwide.

H. MANPOWER STABILIZATION

Because force reductions in Southeast Asia ran ahead of schedule, the Department of Defense has required slightly fewer people in FY 1973 than anticipated. Therefore, we will go into FY 1974 at essentially baseline strength.

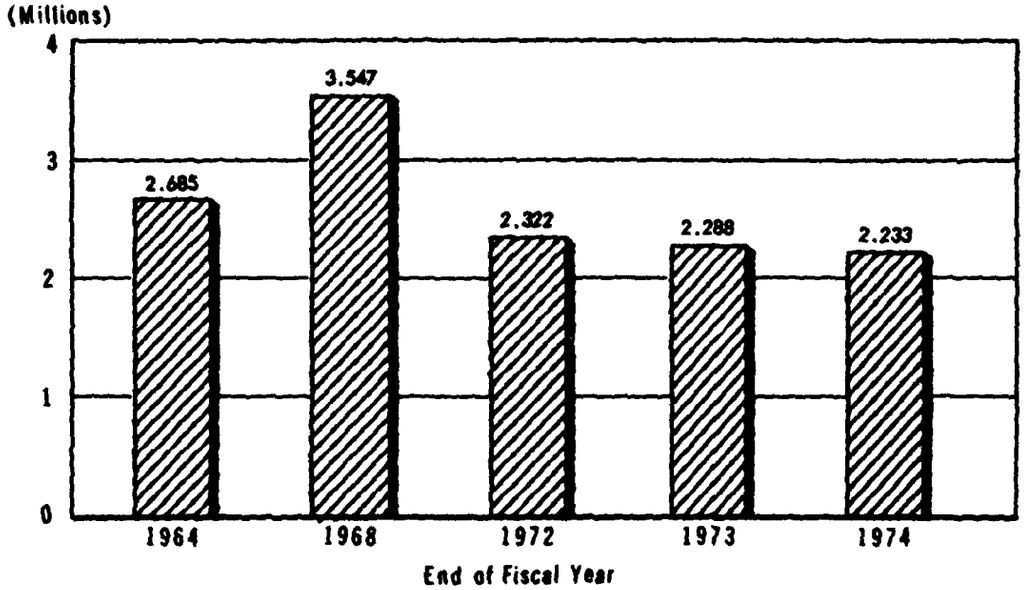
During the years since the peak of United States participation in Vietnam in FY 1968, we have drastically reduced defense manpower, as is shown in the next three charts. Civilian strength will be at the pre-Vietnam level and active force strength will be 452,000 less than in FY 1964. Between end-FY 1968 and end-FY 1974, active force strength will have declined by 1,314,000. These figures reflect the replacement, during the FY 1965-1968 time-frame, of about 100,000 military by civilians as part of the defense-wide civilianization program. In addition, as mentioned earlier, an estimated 31,000 more civilianization actions are expected during FY 1973-1974.

NUMBER OF DIRECT-HIRE CIVILIANS 1/

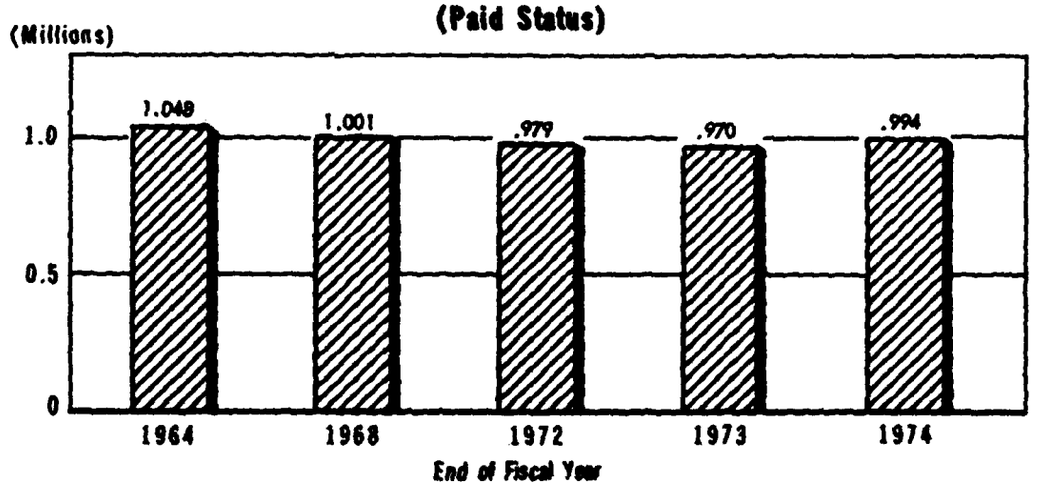


1/ Totals include Army and Air National Guard technicians who were converted from State to Federal employees in FY 1968. FY 1964 and FY 1968 totals have been adjusted to include 38,000 and 39,000 technicians respectively.

ACTIVE DUTY MILITARY END-STRENGTH



RESERVE COMPONENT STRENGTH
(Paid Status)



Such large reductions in the Active Forces and among civilians have caused hardships to many members of the Department of Defense and have been partly responsible for the high personnel turbulence in the Military Services. Fortunately, it has been possible to manage the great bulk of military strength reductions through lower accessions and voluntary early releases of officers and enlisted men before their normal separation dates. In FY 1973, the Department experienced a return to greater personnel stability with the expected attendant increase in efficiency. We intend to make even more progress in FY 1974, to the extent that many newly entering enlisted men may, after their initial periods of training, stay in one location for a large portion of their first enlistment. Indeed, in the Army many men today enlist under options which guarantee them considerable stability.

In the civilian area, a "Stability of Employment" program has been established to minimize involuntary separations. Under this program employment freezes have been used to retain vacancies for personnel who would otherwise be released. The skills of employees facing release are matched with vacancies throughout the Department of Defense, and the employees are given priority right to vacancies through a computerized placement system. This system has worked well, placing about 64 percent of the employees who have been affected by major reductions, consolidations, and closures. As civilian manning levels stabilize, we hope that normal attrition will cover most future civilian reductions.

There is no question that shortcomings in manpower practices do exist in the Department of Defense, as they do throughout society. In his Final Report to the Congress, Secretary Laird indicated several areas in which we must advance, such as equal opportunity, fuller use of educational benefits, and a retirement system equitable to both the service person and the taxpayer. New guidelines have been issued recently for the improved administration of physical disability retirements.

Manpower matters will remain of great concern to DoD. An armed force is only as good as the men and women who comprise it. The homily is true: people are indeed our most important asset. It must always guide our approach to personnel management.

TABLE 1
Department of Defense
FINANCIAL SUMMARY
(In Millions of Dollars)

	FY 1968	FY 1972	FY 1973 a/	FY 1974 a/
Summary by Functional Classification				
Military Personnel	19,939	23,147	23,829	24,680
Retired Military Personnel	2,093	3,889	4,442	5,302
Operation and Maintenance	20,908	21,242	22,341	23,098
Procurement	22,550	18,758	18,622	18,806
Research, Development, Test, & Evaluation	7,264	7,584	8,054	8,658
Special Foreign Currency Program	-0-	12	3	3
Military Construction	1,555	1,227	1,559	1,892
Family Housing & Homeowners Asst. Prog.	614	859	1,024	1,167
Civil Defense	86	78	84	89
Military Assistance Program	588	935	989	1,330
Total - Direct Program (TOA)	75,597	77,731	80,947	85,025
Summary by Program				
Strategic Forces	7,236	7,486	7,360	7,440
General Purpose Forces	30,375	25,198	25,694	26,394
Intelligence and Communications	5,551	5,355	5,714	6,005
Airlift and Sealift	1,756	1,109	865	780
Guard and Reserve Forces	2,196	3,318	4,008	4,439
Research and Development	4,277	6,091	6,526	7,372
Central Supply and Maintenance	8,422	8,539	8,759	8,401
Training, Medical, Other Gen. Pers.Activ.	12,183	15,484	16,421	18,244
Administration and Assoc. Activities	1,237	1,620	1,737	1,720
Support of Other Nations	2,364	3,531	3,864	4,229
Total - Direct Program (TOA)	75,597	77,731	80,947	85,025
Summary by Component				
Department of the Army	24,972	22,214	21,817	22,191
Department of the Navy	20,765	24,094	25,635	27,275
Department of the Air Force	24,917	23,860	24,856	25,399
Defense Agencies/OSD	1,519	1,743	2,046	2,213
Defense-wide	2,750	4,808	5,521	6,526
Civil Defense	86	78	84	89
Military Assistance Program b/	588	935	989	1,330
Total - Direct Program (TOA)	75,597	77,731	80,947	85,025
Financing Adjustments	1,143	281	-1,227	140
Budget Authority (NOA)	76,740	78,012	79,720	85,165
Outlays	78,027	75,957	74,800	79,000

a/ Amounts for military and civilian pay raises, Military Retirement System Reform, and Volunteer force have been distributed.
b/ In addition to grant military assistance, includes Foreign Military Credit Sales. Pending authorization & appropriation legislation, operated in FY 1973 on the basis of continuing resolution authority.

TABLE 2
Department of Defense

SUMMARY OF SELECTED ACTIVE MILITARY FORCES

	Actual June 30, 1972	Estimated June 30, 1973	Estimated June 30, 1974
Strategic Forces:			
Intercontinental Ballistic Missiles:			
MINUTEMAN	1,000	1,000	1,000
TITAN II	54	54	54
POLARIS-POSEIDON Missiles	656	656	656
Strategic Bomber Squadrons	30	30	28
Manned Fighter Interceptor Squadrons	10	8	8
Army Air Defense Firing Batteries	21	21	21
General Purpose Forces:			
Land Forces:			
Army Divisions	12-2/3	13	13
Marine Corps Divisions	3	3	3
Tactical Air Forces:			
Air Force Wings	21	21	21
Navy Attack Wings	14	14	14
Marine Corps Wings	3	3	3
Naval Forces:			
Attack & Antisubmarine Carriers	17	16	15
Nuclear Attack Submarines	56	60	62
Escort Ships	279	244	191
Amphibious Assault Ships	77	65	65
Airlift and Sealift Forces:			
Strategic Airlift Squadrons			
C-5A	4	4	4
C-141	13	13	13
Troopships, Cargoships, and Tankers	87	63	57

January 27, 1973

Table 3

SELECTED MAJOR PROCUREMENT (QUANTITY)

	Fiscal Years		
	72	73	74
Strategic Forces			
NAVY			
Poseidon Conversions (SSBN)	6	6	5
TRIDENT	-	-	1
Land Forces			
ARMY			
Aircraft			
OH-58	400	-	-
U-X	-	20	20
VH-1N	-	6	-
M60A1 Tank (Inc. M60A1E2)	300[a]/	482[b]/	360
MARINE CORPS			
Aircraft			
VH-3D	-	11	-
UH-1N	24	24	24
AH-1J	-	20	20
Light Transport	-	-	1
M60A1 Tank	-	-	120
LVT-7 Family	450	281	-
Tactical Air Forces			
NAVY AND MARINE CORPS			
Aircraft			
A-4M	-	-	24
A-6E	12	21	15
EA-6B	12	7	6
A-7E	24	48	42
AV-8A	30	30	12
E-2C	11	8	9
F-4J	-	-	10
F-14A	48	48	48
KC-130H	-	-	4
AIR FORCE			
Aircraft			
A-7D	97	24	-
A-37B	-	60	-
F-111F	12	12	-
F-4E	36	48	24

SELECTED MAJOR PROCUREMENT (QUANTITY) (CONTINUED)

	Fiscal Years		
	72	73	74
AIR FORCE			
Aircraft (Continued)			
F-5A	-	-	116
F-5B	-	7	-
F-5E	21	57	71
F-15	-	30	77
RF-4C	12	-	-
Naval Forces			
NAVY			
Ships			
CVN	-	-	1
PF	-	1	-
SSN	5	6	5
DLGN	1	-	-
DD-963	7	-	7
DLG-CONV	2	1	2
DLGN-CONV	-	-	1
Support (AS, AOR, AD)	2	2	-
Aircraft			
P-3C	24	12	12
S-3A	13	35	45
T-2C	36	24	24
TA-4J	12	-	-
TA-V8A	-	-	8
EC-130Q	-	1	1
Mobility Forces			
AIR FORCE			
C-130E/H	12	20	36
HH-53	-	6	-
CX-X	-	14	16
VC-X	-	4	-
VC-137C	1	-	-
NAVY			
Aircraft			
C-9B	5	3	-
CT-39B	2	5	-

a/ Includes retrofit of 210 on hand M60A2 tanks.

b/ Includes retrofit of 316 on hand M60A2 tanks.

Table 4
Active Duty Military Personnel, Civilian Personnel and Reserve Component Strength
(end of fiscal years in thousands)

	1964	1968	1972	1973	1974
Direct-Hire Civilian					
Army 1/	360	462	367	344	346
Navy	332	419	342	325	325
Air Force 1/	305	331	280	274	272
Defense Agencies	38	75	61	69	70
Total 1/	1,035	1,287	1,050	1,012	1,013
Active Duty Military					
Army	972	1,570	811	825	804
Navy	667	765	588	574	566
Marine Corps	190	307	198	197	196
Air Force	856	905	726	692	666
Total	2,685	3,547	2,322	2,288	2,233
Reserve Components (in paid status)					
Army National Guard	382	389	388	377	392
Army Reserve	346	312	283	276	291
Naval Reserve	132	131	127	134	122
Marine Corps Reserve	48	48	41	42	40
Air National Guard	73	75	89	89	92
Air Force Reserve	67	46	49	52	55

1/ These totals include Army and Air National Guard Technicians, who were converted from State to Federal employees in FY 1969. The FY 1964 and 1968 totals have been adjusted to include approximately 38,000 and 39,000 technicians respectively.

Table 5
Defense Outlays in Current and Constant (FY 1974) Prices

($ Billions)

	FY 1964	FY 1968	FY 1973	FY 1974
Current prices:				
Payroll	15.8	23.1	30.6	32.0
Other military personnel costs	4.5	7.1	6.0	5.9
Military retired pay	1.2	2.1	4.4	5.3
Family Housing, excluding pay	.5	.4	.7	.8
Total, pay and related	22.0	32.6	41.8	43.9
All other costs (procurement, R&D, construction, supplies & services)	28.8	45.4	33.0	35.1
Total outlays, current dollars	50.8	78.0	74.8	79.0
Constant (FY 1974) prices:				
Payroll	34.7	40.7	32.6	32.0
Other military personnel costs	6.9	9.5	6.6	5.9
Military retired pay	5.3	5.3	5.3	5.3
Family Housing, excluding pay	.8	.5	.7	.8
Total, pay and related	47.7	56.0	45.2	43.9
All other costs (procurement, R&D, construction, supplies & services	40.1	57.4	34.0	35.1
Total outlays, constant (FY 74) prices	$87.8	$113.4	$79.2	$79.0

NOTE: Detail may not add to totals because of rounding.

Table 6
Defense Total Obligational Authority (TOA) in Current and Constant (FY 1974 TOA) Prices
($ billions)

	FY 1964	FY 1968	FY 1972	FY 1973	FY 1974
Current prices:					
Pay and other operating costs:					
Baseline force	26.4	32.8	44.3	47.9	52.0
Incremental war costs	-	10.7	4.6	3.5	1.8
Total, pay and other operating costs	26.4	43.4	48.9	51.3	53.9
Research and investment:					
Baseline force	24.4	23.5	26.5	26.9	30.1
Incremental war costs	-	8.6	2.4	2.7	1.1
Total, research and investment	24.4	32.2	28.8	29.6	31.1
Total obligational authority:					
Baseline force	50.7	56.3	70.7	74.7	82.1
Incremental war costs	-	19.3	7.0	6.2	2.9
Total obligational authority	50.7	75.6	77.7	80.9	85.0
Constant (FY 1974) prices:					
Pay and other operating costs:					
Baseline force	52.9	53.4	51.4	51.3	52.0
Incremental war costs	-	15.6	5.2	3.6	1.8
Total, pay and other operating costs	52.9	69.0	56.5	54.9	53.9
Research and investment:					
Baseline force	34.8	30.6	28.3	27.8	30.1
Incremental war costs	-	10.9	2.5	2.8	1.1
Total, research and investment	34.8	41.5	30.8	30.6	31.1
Total obligational authority:					
Baseline force	87.8	84.0	79.6	79.1	82.1
Incremental war costs	-	26.5	7.7	6.4	2.9
Total obligational authority	87.8	110.5	87.3	85.5	85.0

NOTE: Detail may not add to totals because of rounding.

Constant-price data have been adjusted to take account of shift of alterations and modifications funding occurring in FY 74, so that figures are comparable as to coverage.

Table 7
Changing Priorities

	FY 1964 to FY 1968	FY 1968 to FY 1974	FY 1964 to FY 1974
Change (current $ billions) in:			
Defense Spending	$+ 27.2	$+ 1.0	$+ 28.2
Other Federal Spending	+ 34.6	+ 93.5	+ 128.1
State and Local Spending	+ 33.1	+ 103.2	+ 136.3
Change (constant FY 1974 $ billions) in:			
Defense Spending	$+ 25.6	$- 34.4	$- 8.8
Other Federal Spending	+ 29.7	+ 50.0	+ 79.7
State and Local Spending	+ 28.0	+ 60.9	+ 88.9
Public Employment (000)			
Defense (includes military)	+1,114	-1,588	- 474
Other Federal	+ 230	- 1	+ 229
State and Local	+1,905	+2,365	+4,270
Total, Public Employment	+3,249	+ 776	+4,025
Total labor force (000)			
Defense a/	+2,007	- 2,877	- 870
All Other	+4,800	+12,587	+17,387
Total Labor Force Change a/	+6,807	+ 9,710	+16,517

Defense spending as % of:

	GNP	Federal Budget	Net public Spending (Federal, State & Local)
FY 1950 (pre-Korea)	4.5%	26.8%	18.8%
FY 1953 (Korea Peak)	13.3%	60.3%	46.1%
FY 1964 (last peacetime year)	8.3%	41.8%	28.1%
FY 1968 (SEA peak)	9.4%	42.5%	29.2%
FY 1970	8.2%	38.4%	25.1%
FY 1971	7.5%	34.5%	22.2%
FY 1972	6.9%	31.7%	20.6%
FY 1973	6.2%	29.0%	18.9%
FY 1974	6.0%	28.4%	18.0%

a/ Includes military and Civil Service personnel and Defense-related employment in U.S. industry.

U. S. GOVERNMENT PRINTING OFFICE : 1973 O - 499-262